

The ATLAS - 2014

Transdisciplinary-Transnational-Transcultural

International Conference

ASIA UNIVERSITY
TAICHUNG, TAIWAN
June 8-13, 2014

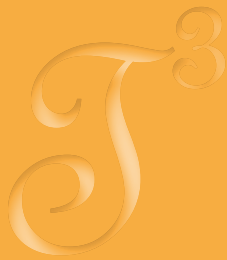


HONORING

Dr. BASARAB NICOLESCU



TheATLAS



International Conference

**ASIA UNIVERSITY
TAICHUNG, TAIWAN
June 8- 13, 2014**

CONFERENCE THEME
The Science,
Applications, and
Transdisciplinary Education

2014 TheATLAS T³ International Conference will be held at Asia University (AU). Asia University is a newly established and well regarded private university located in Taichung County, Taiwan. It is recognized in Taiwan for its renowned research and teaching excellence in Health Care, computer science, and management. Asia University was founded at the beginning of the 21st century. Due to its carefully-planned development, incessant progress, and innovative breakthroughs, the young university has become well-recognized in numerous aspects in Taiwan and the other parts of the world.

FOCUS OF ANNUAL MEETING

The T³ International Conference program will consist of invited and selected papers emphasizing transdisciplinary, transnational and transcultural global problems. Plenary sessions and keynote panels will be presented by prominent speakers.

Educational programs face many difficulties because of the rapid change of technology in today's environment. During the last decade, the number of complex problems facing engineers has exploded, and the technical knowledge and understanding in science and engineering required to address and mitigate these problems is rapidly evolving. The world is becoming increasingly interconnected as new opportunities and highly complex problems connect the world in ways we are only beginning to understand. When we do not solve these problems correctly and in a timely manner, they rapidly become crises. Problems, such as energy shortages, pollution, transportation, the environment, natural disasters, safety, health, hunger and the global water crisis, threaten the very existence of the world as we know it today. None of these complex problems can be understood from the sole perspective of a traditional discipline.

During this conference, multicultural researchers, practitioners, and educators will share their experiences and thoughts concerning the impact diverse cultural backgrounds have on education. More specifically:

- global higher education revolution --- how world university systems can collaborate more efficiently,
- transnationalization through information technology and exportation of education as a commodity,
- the potential for educational programs based on the transdisciplinary methodology and methods.
- transdisciplinary research approaches for complex global issues.
- How to teach students innovation and collaboration

skills, educating them broadly and preparing them for an increasingly transdisciplinary, collaborative, and global job market.

- Transdisciplinary education and preparation for the length of our life.
- new methodology in engineering education that is focused on teaching students transdisciplinary skills thereby allowing them to become creative and innovative engineers.
- Challenges to shift from disciplinary thinking to transdisciplinary thinking.

SPONSORED BY

- Asia University, Taichung, Taiwan
- The Academy of Transdisciplinary Learning & Advanced Studies (TheATLAS)

CO-SPONSORED BY

- Academy of Transdisciplinary Studies (ATS) and Mechanical Engineering Department, Texas Tech University
- Ministry of Education, Taiwan
- International Center for Transdisciplinary Research & Studies (CIRET), France

CONFERENCE COMMITTEE

Honorary Conference Chairman

David C.L. Liu
Academia Sinica, Taiwan

Conference Chairman

James Smith
Texas Tech University
Lubbock, Texas, USA

Program Chairman

Atila Ertas
Texas Tech University
Texas, USA

Program Vice-Chairmen

Anthony Y. H. Liao
Asia University
Taichung, Taiwan

Derrick Tate
Xi'an Jiaotong
Liverpool University
Suzhou, China

GEORGE AND RONYA KOZMETSKY MEMORIAL LECTURES

In 2011, The George & Ronya Kozmetsky (**G&R K**) Memorial lectures at The Academy of Transdisciplinary Learning and Advanced Studies (TheATLAS) have been established to honor the memory of their shared passion for innovation, service, and global prosperity.

GEORGE AND RONYA KOZMETSKY MEMORIAL MEDAL AWARD

The George and Ronya Kozmetsky Memorial Medal Award was established in 2011 as a special honor to the distinguished lecturer of the **G&R K** Memorial lecture.



George & Ronya Kozmetsky were partners in life, who shared a passion for service to society through innovation and inspiring young men and women to face the future with confidence and to embrace leadership positions in business and society. As an example of their partnership, they co-authored a popular book "Making It Together: A Survival Manual for the Executive Family." They also served

on advisory boards at schools throughout the country, spoke to student groups, worked for curricular innovation, sponsored leadership conferences, and supported innovative faculty research through the family's RGK Foundation.

Dr. Kozmetsky was a co-founder and former Executive Vice President of Teledyne, Inc.—the first major technology conglomerate in the US with more than 100 companies. At The University of Texas at Austin, where Dr. Kozmetsky was dean for sixteen years, he pioneered in educational technology and education about technology, revolutionizing the curriculum and the manner in which it was taught. His vision, his energized drive, his ability to call on the resources of major corporations throughout America, his concept of educating students by incorporating computers and technology in the classroom, and his far-reaching motivational leadership enabled him to lift the College and Graduate School of Business into the top rank in the nation. More than twenty thousand students graduated under his deanship. He also participated in the founding of the Graduate School of Industrial Admin-

istration at Carnegie Mellon University, and was a founding board member of the ATLAS.

In 1977, Dr. George Kozmetsky (1917-2003) founded the IC² Institute at The University of Texas at Austin and began his long march of helping to make Austin the 4th technopolis in the US (the other three being Boston, Silicon Valley, and North Carolina's research triangle) in half the time, i.e. about 15 years.

With his special capability to "connect the dots", he was the key architect to facilitate a coordinated state, city, and academia drive in achieving this dream which was realized in the early 1990's. Along the way, he created the Austin Technology Incubator at The University of Texas at Austin, which combines economic development and business education; and the Texas Capital Network, which promotes innovative financing for new ventures. His contributions have resulted in employment for tens of thousands of Americans and billions of dollars of exports. He has been intimately involved in facilitating technology transfer from the public, federal, and university sector, into private enterprise. Dr. Kozmetsky has counseled, nurtured, and developed more than a hundred companies; he has helped to launch them, served on their boards, assisted in identifying key personnel and niche markets, and on occasion helped finance them. His accomplishments helped to bolster our nation's competitive position in world markets. Dr. Kozmetsky was awarded the National Medal of Technology in 1993 as an acknowledgement of his exceptional contributions in technology and education.

Mrs. Ronya Kozmetsky spent her life as a champion of children, women's issues and opportunities. She was instrumental in the establishment and success of several organizations – both non-profit and for profit – including SafePlace women's shelter and the First Women's Bank of California, a pioneering institution to provide women banking services including access to credit to enable them to start their own business. Additionally, she is a Co-Founder of Leadership Texas, Leadership California, and Leadership America – a network of accomplished women, dedicated to advancing the leadership role women play in impacting business, social issues and public policy. Ronya was also involved in many organizations including: the Center for Child Protection, The Austin Project, Covenant House, the Austin Symphony and Symphony Square, and the CEDEN Family Resource Center. She was a Visiting Committee Member at the School of Social Work at the University of Washington, Advisory Committee Member of the Women's Resource Center in Waco, Member of the Governor's Task Force for Equal Opportunity in Employment for Women and Minorities, and on the Board of Directors of the Texas Foundation for Higher Education. She also served on the City of Austin Child Care Council and the Texas State Treasurer's Asset Management Advisory Committee.

KWOH-TING LI MEMORIAL LECTURES

In 2012, The Kwoh-Ting Li (KTL) Memorial lectures at The Academy of Transdisciplinary Learning and Advanced Studies (TheATLAS) have been established to honor the memory of Kwoh-Ting Li.

KWOH-TING LI MEMORIAL MEDAL AWARD

The Kwoh-Ting Li Memorial Medal Award was established in 2012 as a special honor to the distinguished lecturer of the **Kwoh-Ting Li** Memorial lecture.

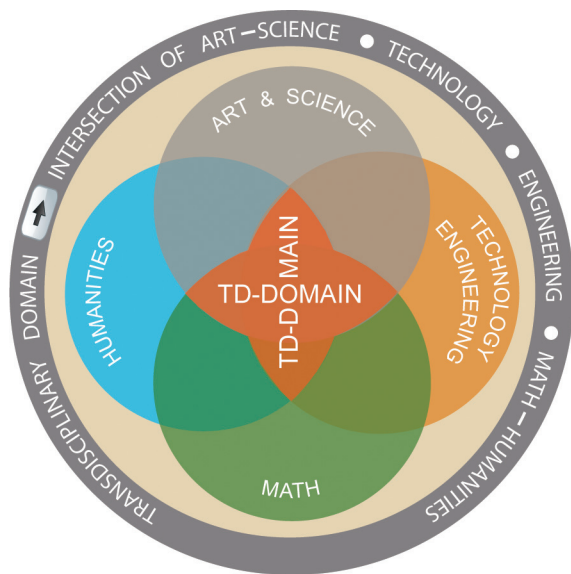


K.T. Li was a Chinese economist and politician best known as the "Father of Taiwan's Economic Miracle" for his work in transforming Taiwan's economy from an agrarian-based system into one of the world's leading producers of information and telecommunications technology. He had founded Hsinchu Science Park. In recognition of Li's contributions to the

industrialization of his country, he was awarded the Ramon Magsaysay Award by the Ramon Magsaysay Award Foundation of the Philippines in August 1968 for government service. The Award was generally considered an Asian equivalent of the Nobel Prize. In July 1969, Li was offered the post of Minister of Finance in a cabinet reshuffle, which he accepted with some reluctance because of his greater interest in industrial development. Nonetheless, Li carried out his duties as Finance Minister with remarkable success and dedication. Upon assuming his new post, Li immediately organized a small team with legal advisors and started to search for ways to modernize the fiscal system. He developed several innovations which improved the nation's fiscal system tremendously.

His written works number more than 1,000 items, some of which have appeared in English. In 1976 Mei-Ya Publishing Company in Taipei came out with the first edition of his collected papers under the title *The Experience of Dynamic Economic Growth on Taiwan (1959-1975)* by Mei-Ya Publishers. A second publication of collected papers *The Economic Transformation of Taiwan (1976-1988)*, has published by Shephard-Walwyn Ltd. of the United Kingdom later in October 1988. After retirement in 1990, he received the First Cynthia and George Mitchell International Award in Biotechnology in Houston, Texas, USA. Li holds distinguished Honorary Citizen of the State of Arizona, USA (1987) and Distinguished Honorary Citizen of the State of Texas, USA (1990). He is an honorary member of the ATLAS and the recipient of the The ATLAS-Academy Gold Medal of Honor award.

I³ International Conference



**Transdisciplinary Domain:
Intersections of Art & Science,
Technology, Engineering,
Math, and Humanities.**

WELCOME RECEPTION

**5:30-7:30 pm, Sunday, June 8, 2014
Splendor Hotel**

Participants and their partners are invited to attend the welcome reception which will take place in the Splendor Hotel on Sunday, 8 June from 5:30 - 7:00 pm. Participants and their partners should book in advance in order to allow for proper organisation of this event (see registration form).

CONFERENCE KEYNOTE ADDRESS

Dr. Basarab Nicolescu

8:00 am- 8:30 am, Monday, June 9

Room: A101



Dr. Basarab Nicolescu
*Member of the
Romanian Academy,
President, International
Center for Transdisciplinary
Research and Studies (CI-
RET)
France*

Transdisciplinary Bridges between Science, Culture, Spirituality, and Society

Theoretical physicist at the Centre National de la Recherche Scientifique (CNRS), Paris, France. Professor at the Babes-Bolyai University, Cluj-Napoca, Romania. Member of the Romanian Academy. Professor Extraordinary at the School of Public Leadership, Stellenbosch University, South Africa. Founding member of ISSR. President-Founder of the International Center for Transdisciplinary Research and Studies (CI-RET), a non-profit organization (165 members from 26 countries), which has a web site at : <http://ciret-transdisciplinarity.org/index.php>. Founder and Director of the Transdisciplinarity Series, Rocher Editions, Monaco, of the Romanians in Paris Series, Oxus Editions, Paris and of the Science and Religion Series, Curtea Veche, Bucharest (in collaboration with Magda Stavinschi). A specialist in the theory of elementary particles, Basarab Nicolescu is the author of 130 articles in leading international scientific journals, has made numerous contributions to science anthologies and participated in several dozen French radio and foreign multimedia documentaries on science. Basarab Nicolescu is a major advocate of the transdisciplinary reconciliation between Science and the Humanities. He published many articles on the role of science in the contemporary culture in journals in USA, France, Romania, Italy, United Kingdom, Brazil, Argentina and Japan. His books include : *From Modernity to Cosmodernity - Science, Culture, and Spirituality*, State University of New York (SUNY) Press, New York, 2014, *Manifesto of Transdisciplinarity*, State University of New York (SUNY) Press, New York, 2002; *Nous, la particule et le monde*, Rocher, Monaco, 2002 (2nd edition) ; *Science, Meaning and Evolution - The Cos-*

mology of Jacob Boehme, Parabola Books, New York, 1991. He "recently" edited *Transdisciplinarity - Theory and Practice*, Hampton Press, Cresskill, New Jersey, 2008. A complete bibliography of Dr. Basarab Nicolescu can be found on the page: <http://basarab-nicolescu.fr/>.

KWOH-TING LI MEMORIAL LECTURE

Dr. Jin-Fu Chang

8:30am - 9:00 am, Monday, June 9

Room: A101



Dr. Jin-Fu Chang
*President
Yuan Ze University,
Board Chairman, Institute for
Information Industry*

Jin-Fu Chang was born in 1948 in Taiwan. He received his B. S. in Electrical Engineering from the National Taiwan University (1970) and Ph. D. in Electrical Engineering and Computer Sciences from the University of California at Berkeley (1977).

In his past, he had held teaching and research positions at the National Taiwan University, National Central University, and National Chi Nan University in Taiwan and the Naval Postgraduate School at Monterey, California, USA.

He also has held a number of administrative posts in Taiwan including Department Head of Electrical Engineering, National Taiwan University; Director of the Office of Science and Technology Advisory Office, Ministry of Education; Dean of Academic Affairs, National Central University; Deputy Minister of the National Science Council; President of the National Chi Nan University; Minister of the Executive Yuan (Cabinet) of the Government of Taiwan, Board Chairman of Industrial Technology Research Institute (ITRI), and Governor of Taiwan Province.

He is presently President of Yuan-Ze University and Board Chairman of Institute for Information Industry (III).

His recent research interest is wireless communications, particularly wireless mobile communications under very high mobility.

GEORGE AND RONYA KOZMETSKY MEMORIAL LECTURES

Dr. Juan M. Sanchez

9:00 am- 9:30 am, Monday, June 9

Room: A101



Dr. Juan M. Sanchez
*Vice President for Research
The University of
Texas at Austin, TX*

Intelligent Elements of a Smart City

Dr. Juan M. Sanchez is the Vice President for Research at The University of Texas at Austin and holder of the Temple Foundation Endowed Professorship #4 in the Department of Mechanical Engineering.

He obtained his B.S. in Physics at the University of Cordoba, Argentina, 1971; M.S. in Materials Science, 1974; and Ph.D. in Materials Science, 1977 at the University of California, Los Angeles. Dr. Sanchez is the author and co-author of over 140 technical publications on a wide range of topics in materials science and engineering. His current research interests are in the electronic, thermodynamic and structural properties of materials including intermetallic compounds, magnetic and non-magnetic alloys, thin films and magnetic multilayers. Primary interest is the development and application of first principles computational methods for the construction of phase diagrams of multicomponent material systems. Other research interests include the development of laser-controlled selective chemical vapor deposition processes for metals, alloys and ceramics.

Dr. Sanchez serves on the Council of Federal Relations of the Association of American Universities; the Board of Trustee of the Southwestern Universities Research Association; the National Scientific and Policy Advisory Council for the Hogg Foundation for Mental Health; the International Advisory Board of the University of Nuevo Leon, Mexico; and the External Evaluation Committee of the Instituto Potosino de Investigacion Cientifica y Tecnologica, Mexico. Dr. Sanchez

is a past member of the Board of Visitors of the US Army War College; the Committee on Science, Engineering, and Public Policy of the American Association for the Advancement of Science; and the Board of Directors of the Oak Ridge Associated Universities.

THE ATLAS GOLD MEDAL OF HONOR AWARD PRESENTATION AND LECTURE

Barry Lam

10:00 am- 10:30 am, Monday, June 9

Room: A101



Barry Lam
*Chairman & CEO
Quanta Computer Inc.*

Barry Lam has been described as a maverick among Taiwanese businessmen. Barry was born and raised in Hong Kong, but moved to Taiwan to attend National Taiwan University, where he received his bachelor's and master's degrees. In 1973 he and some former classmates launched Kimpo, a maker of handheld calculators. Barry became president and built the company into the world's largest contract calculator maker. But by the late 1980s, Barry Lam was looking for new challenges. As technology for making flat-panel displays matured, he figured the next big thing would be notebook PCs. Unfortunately, as a minority shareholder of Kimpo, Barry couldn't persuade the company's directors to take a risk on these new computers so he quit and started Quanta in 1988. Within two years, the young company had attracted Siemens and Philips Electronics as customers, among others.

Quanta has continued to lead the industry in portable, ubiquitous electronic systems. While 2001 was a year to forget for almost everybody in the PC world, Quanta continued to grow. Back in 2000 Quanta produced a customized laptop computer in 72 hours; a year later—48 hours; today—less than 24 hours. Quanta had moved all its production to China. With annual turnover over US\$33BN today, Quanta is one of the world's leading providers of technology products and

solutions to Fortune 500 companies such as Apple, HP, Dell, IBM, Sony and others. Quanta holds the distinction as the world's largest manufacturer of laptop PCs, making over 1 in every 3 laptop PCs globally today. Quanta also provides a full array of mobile phones, mobile internet devices and servers and storage products. As Barry will tell you, Quanta's success is made possible by the company's ability to provide customers with high value added services from innovative product development, flexible manufacturing, real-time supply chain management to after sales service and support. Barry is convinced that product diversification and innovation will keep Quanta's flexible manufacturing busy for years to come.

With the dedication to technological innovation and education, Barry launched the \$200M R&D center project, Quanta R&D Complex (QRDC), in Taiwan. With floor space of 2.2M square feet and a capacity to house up to 7,000 engineers, QRDC is being touted by many in Taiwan as the "Dreamland of R&D Engineers." QRDC inaugurated in late 2005 which is the headquarter of Quanta Computer Inc.

In 2005, Quanta and MIT announced a five-year, \$20M joint research collaboration project ("TParty") aimed at developing the next generation of platforms for computing and communication beyond personal computers. Furthermore, Quanta are hoping to build closer ties with more worldwide research institutes, tackling some advanced research projects that complement the Quanta-MIT TParty project and help expand the vision to provide reliable, affordable access to the benefits of information and communications technologies to all the world's citizens.

In both 1999 and 2001, Barry was chosen by Business Week as one of the fifty "Stars of Asia". In 2002, he was highlighted on Business Week's list of the top 25 managers of the year for his achievements in taking Quanta to the number 1 notebook maker in the world. In 2005, Barry received degree of doctor for technology honoris causa from Hong Kong Polytechnic University. Barry received Honorary Doctoral Degrees from National University (NTU) in 2007, and City University of Hong Kong (CityU) in 2011. In 2012, National Tsing-Hua University and National Chiao Tung University respectively had awarded an honorary doctorate to Barry to honor his outstanding achievement in the industry; his exemplary humanitarian spirit, and his efforts to promote art and literature.

Barry is also the Director of Cloud Gate Theatre Group and the Chairman of Quanta Education Foundation. The foundation has supported numerous charitable activities and promoted culture and arts to enrich people's lives. From year 2008, Barry is the member and Convener of National Palace Museum Advisory Committee. He is the Chairman of Epoch Foundation since 2008 and joins current membership of MIT EECS visiting committee.

PLENARY SESSION - I The Essence of Transdisciplinarity

10:30 am- 12:00 pm, Monday, June 9

Room: A101

PLENARY TALK-1

Dr. C. V. Ramamoorthy

10:30 am- 11:00 am, Monday, June 9

Room: A101



Professor C.V. Ramamoorthy
*University of California
Berkeley, CA*

Virtual Transdisciplinary Space

Dr. Ramamoorthy's distinguished career tracks back to the 1960s. In 1961, while working as a scientist for Honeywell, Ramamoorthy developed the entire microcode to handle instruction sequencing and control for the H290, Honeywell's first transistorized system. The H290 was a general-purpose, stored-program digital computer designed for process monitoring and control. In the late 1960s, Ramamoorthy joined the University of Texas, Austin, as a professor of electrical engineering and computer science, later becoming chair of the computer science department. At UC Berkeley, where he joined the faculty in 1972, Ramamoorthy is an emeritus professor of Electrical Engineering and computer science. Most recently, his research investigations have focused on service industries, functions, features, and control and the relationships between software and service engineering. IEEE Society has honored Ramamoorthy's achievements with the Taylor L. Booth Education Award in 1989, the Richard E. Merwin Distinguished Service Award in 1993, Golden Core recognition in 1966, and Tsutomu Kanai Award in 2000. He also received the IEEE Centennial Medal and the IEEE Third Millennium Medal. He has been an IEEE Fellow since 1978 and is a Fellow of the Society for Design and Process Science, from which he received the R.T. Yeh Distinguished Achievement Award in 1997. A longtime Computer Society volunteer, Ramamoorthy

was founding editor in chief of IEEE Transactions on Knowledge and Data Engineering and served as editor in chief of IEEE Transactions on Software Engineering. He holds two undergraduate degrees in Physics from India. He obtained two graduate degrees in Mechanical Engineering from University of California at Berkeley, and two graduate degrees in Applied Mathematics and Computer Sciences from Harvard.

PLENARY TALK-2 Dr. Sarah Gehlert

11:00 am- 11:30 am, Monday, June 9

Room: A101



Sarah Gehlert, Ph.D.
*E. Desmond Lee Professor of
Racial and Ethnic Diversity
The George Warren Brown
School of Social Work &
Department of Surgery, School of
Medicine, Washington University*

Measuring Progress in Establishing Transdisciplinary Ties to Foster the Flow of Scientific Discovery

Sarah Gehlert, Ph.D. is the E. Desmond Lee Professor of Racial and Ethnic Diversity at the Brown School and in the Department of Surgery of the School of Medicine. She is a scholar in Washington University's Institute of Public Health and serves on its Faculty Advisory Committee. Dr. Gehlert is the Co-Program Leader of the Prevention and Control Program of the Alvin J. Site man Cancer Center, Co-Director of the Transdisciplinary Center on Energetics and Cancer (TREC), and Training Program Director of the Program for the Elimination of Cancer Disparities (PECaD). Dr. Gehlert serves on the Executive Committee of the university's Institute for Clinical and Translational Science (a CTSA) and the Co-Chair of the Center for Community-Engaged Research. Dr. Gehlert joined the Brown School in 2009 from the University of Chicago where she was the Helen Ross Professor in the School of Social Service Administration (SSA), the Institute for Mind and Biology, and the Department of Comparative Human development. While at the School of Social Service Administration, Dr. Gehlert served as the Deputy Dean for Research. She was the Associate Director of the University of Chicago's NIH-funded Institute for Translational Medicine (a CTSA) and co-chaired its Community Translation Science

Cluster. She was also the Principal Investigator and Director of the university's NIH-funded Center for Interdisciplinary Health Disparities Research. She directed the university's Maternal and Child Health training Program from 1992-1998 and was Principal Investigator on an NIMH-funded community-based study of rural and urban women's health and mental health from 1997-2001. She was Co-Principal Investigator and Core Leader of the Health Disparities and Communities Core of the CDC-funded Chicago Center of Excellence in Health Promotion Economic from 2004-2007. Dr. Gehlert's publications focus on social influences on health, especially the health of vulnerable populations. She currently is working on the influences of neighborhood and community violence and unsafe housing on psychosocial functioning among African-American women newly diagnosed with breast cancer, with an eye toward how these factors "get under the skin" to affect gene expression and tumorigenesis. She has a special interest in the biology of women's behavior.

Dr. Gehlert is a member of the Board of Scientific Counselors of the National Human Genome Research Institute at NIH, which is a federal appointment. She is Co-Chair of the Population Health Advisory Committee of the Office of Behavioral and Social Science Research at NIH. She is a chartered member of NIH's Community-Level Health Promotion Scientific Review Panel and a member of the scientific review panel for Oncology Social Work at the American Cancer Society.

Dr. Gehlert is a Fellow in the American Association of Social Work and Social Welfare. She is Past President of the Society for Social Work and Research and serves on the editorial boards of Health & Social Work, Social Work Research, Social Service Review, Research in Social Work Practice, and Oxford Bibliographies Online (Social Work).

PLENARY TALK-3 Dr. John K. C. Liu

11:30 am - 12:00 pm, Monday, June 9

Room: A101



Dr. John K. C. Liu
*President and
Executive Director of
Building & Planning Research
Foundation
National Taiwan University, NTU
Taiwan*

Participatory Design Thinking : A TD perspective

Dr. John K.C. Liu is the President and Executive Director of Building and planning research Foundation at National Taiwan University. Dr. Liu attended the Rhode Island School of Design from 1963-1965, and received a BS from the Cooper Union in New York in 1968. he received M.S. in architecture, from University of Washington, Seattle, 1969; and Ph.D. in architecture from Architecture Institute, University of California, Berkeley, 1980.

Dr. Liu's current research interests are in the sustainable development and environment planning, ecological design and planning, participative design method and theory, community design and planning, historical space renovation architecture design.

Dr. Liu had teaching and research positions at the National Taiwan University, Tsinghua University, Beijing, China, University of California, Berkeley, Chung Yuan Christian University, Taiwan, and Pennsylvania State University.

Dr. Liu's contributions to sustainable development and environment planning have been recognized by numerous honors and awards. The honors and awards include: 16th Taipei Culture Award; Taiwan Architects Association Annual Awards, First Prize, I-lan County Performing Arts Center; California Asian American Association of Engineers award for design excellence; State of California Affordable Housing Award; U.S. National Science Foundation Public Service Science Residency award; Progressive Architecture Awards Citation in Applied Research.

CONFERENCE LUNCHEON SPEAKER

Dr. Ted Chang

12:00 pm - 1:30 pm, Monday, June 9

Room: L011



Dr. Ted Chang
*Vice President and
Chief Technology Officer
Quanta Computer Inc.*

Education as Service

Dr. Ted Chang is Vice President and Chief Technology Officer (CTO) of Quanta Computer Inc. He oversees corporate technology strategy, advanced product development and global partnership. Along with his role as CTO, he also serves as the president of Quanta Research Institute (QRI) for advanced research, innovation and new business incubation.

Starting in 2004, Dr. Chang has initiated and served as the Quanta program director of the T-Party Project, a 10-year research project for future computing and communication between Quanta and MIT's Computer Science and Artificial Lab (CSAIL).

Dr. Chang is a board director of Epoch Foundation, Quanta Research Cambridge, Inc. and Digimax, Inc., the best 3D animation film winner of both the 2008 Tokyo Anime and the 2010 LA Movie Festival.

Dr. Chang had been the executive assistant to the CEO and Chairman of Quanta on his strategic planning effort for ten years. During the same period of time, he also led the planning office and the corporate IP team, as well as incubated several new business units, new spin-offs and research labs in Quanta.

Over the past ten years, Dr. Chang and the QRI team have received recognition globally, including the best technology management award from CSMOT in 2006, a regional winner award from European Satellite Navigation Competition in 2008 and the best innovation enterprise award from MOEA in both 2003 and 2010, among others. Dr. Chang's past projects, One Laptop Per Child (OLPC) and the QRI research model, were published as business cases by Harvard Business School.

Dr. Chang holds B.S. (88), M.S. (92) and Ph.D. (96) degrees, all from the Institute of Aeronautics and Astronautics, National Cheng-Kung University. Dr. Chang's research now focuses on innovation management, user experience design and service engineering over cloud computing.

KEYNOTE PANEL - I Leadership in the 21st Century

1:30 pm - 3:00 pm, Monday, June 9

Room: A101

KEYNOTE PANEL - I DISTINGUISHED SPEAKERS



Dr. Da Hsuan Feng
*Senior Vice President of
Global Strategy, Development,
and Evaluation
National Tsing Hua University
Taiwan*

He became the M. Russell Wehr Chair Professor of Physics of Drexel University. During his tenure at Drexel University, he also held appointments as Director of Theoretical Physics of the United States National Science Foundation, visiting professor of Niels Bohr Institute of the University of Copenhagen and United Kingdom Daresbury Laboratory. Feng was a consultant for three National Laboratories in the United States, Los Alamos, Oak Ridge and Brookhaven and UK's Daresbury Laboratory.

From 1995-1998, Feng assumed the position as technical advisor to the Vice Chairperson of the United States Congressional Armed Services Committee, the honorable Curt Weldon. He was responsible for affairs in central Europe and Asia. From 1998-2000, he became the Vice President of Science Applications International Corporation (SAIC.) His portfolio included affairs in the four States in northeast United States: New Jersey, Maryland, Pennsylvania and Delaware. SAIC is a Fortune 500 international corporation. Feng's other activities include: Special advisor to Korean American Science and Technology Network, a member of the Computer Science/Engineering Evaluation Task Force of the University of South Carolina, a member of the US Department of Education Field Initiated Studies Technology Panel, and a member of the National Defense Industrial Association Science and Engineering Technology Executive Committee.

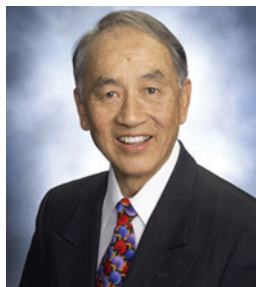
From 2001-2007, Feng assumed the position as Vice President for Research and Economic Development of the University of Texas at Dallas (UTD.) During his tenure at UTD, research expenditure increased three-fold, from \$14 million in 2001 to nearly \$50 million in 2006. Likewise, the intellectual strengths of UTD also significantly enhanced. He personally recruited two Nobel laureates (the late-Alan G. MacDiarmid, chemistry laureate in 2000 and Russell Hulse, physics laureate in 1993), the former European Space Agency director and the entire nanotechnology team from Honeywell R&D division in Morristown, New Jersey. He also secured a \$1 Million endowed James Von Ehr chair of science and technology which was held by the late-Alan MacDiarmid.

He also initiated a consortium of seven universities in Texas known as the Strategic Partnership for Research in Nanotechnology (SPRING) and followed through with a \$41.5

million earmark funded, located \$1.5 million and \$1 million earmark funds respectively for Sickle Cell and Texas border disease tracking studies, funded a “nano-at-the-border” program to accelerate the research infrastructures of two Texas border universities. He also cultivated industrial collaborative relations, such as the Oracle Spatial Data Center.

In 2007, Feng was one of the founding members of the powerful Advisory Board of the Britton Chance Center for Biomedical Photonics of China’s Huazhong University of Science and Technology in Wuhan, Hubei Province. In 2009, in recognition of his contribution to the development of science and technology of the province of Hubei, Feng was awarded the Chime-Bell Award.

In 1996, for (his) outstanding contributions to the understanding of nuclear structure physics, particularly for the applications of the coherent states to physics and nuclear physics,” Feng received the accolade Fellow of the American Physical Society. Feng has published over 180 refereed papers in nuclear physics, nuclear astrophysics, quantum optics and mathematical physics. He was the editor of twenty books on conference proceedings, and presented numerous invited talks in International Conferences. Feng has directed six doctoral students, six postdoctoral fellows and numerous undergraduate students. He had also organized more than thirty international conferences.



Dr. Raymond T. Yeh
TheATLAS
Honorary Board member

Raymond Yeh taught at several universities for more than 20 years and helped two Computer Science departments to top ten national rankings as chairman of department. He was also the CDC distinguished chair Professor at the University of Minnesota. He holds honorary professorship at five universities. Dr. Yeh is the founding editor-in-chief of IEEE Transactions on Software Engineering and was on the editorial board of various journals. He also founded the Technical Committee on Software Engineering and International Conference on Software Engineering (ICSE) within the IEEE Computer Society.

Dr. Yeh co-founded two successful software companies and two professional societies. He has been a consultant to many nations including United Nations, United States, China, Japan, Singapore, Sweden, Taiwan, and works with execu-

tives of many leading edge global companies as well as with founders of start-up companies. He has published 10 technical books and coauthored two business books.

Dr. Yeh is an IEEE Centennial Medal laureate, and a recipient of the Pioneer in Information Technology Award from the government of Taiwan, among others. He is a fellow of Institute of Electrical and Electronic Engineers (IEEE), the Society for Design and Process Science (SDPS), and a senior research fellow at IC2 Institute at the University of Texas at Austin.



Bob Block
Founder and the First Chairman
of the United States Sports
Academy and
Founder and Managing
Partner of LiTricity

Block is a Founder and a Managing Partner of LiTricity, a shareholder and Board member of USCL and the Co-Chair of the Advanced Technology Policy Committee of the National Energy Marketers Association. Mr. Block has extensive experience in the computer software, communication, energy and entertainment industries including pioneering roles in commercial and pay television and cellular telephone operating companies. He has also contributed significantly to the creation and development of entertainment and communication technologies used worldwide.

Block is widely known for his pioneering work in communications, information and management technologies. He is the inventor and patent owner of more than 150 issued US and International patents, including patents relating to: Enterprise Management Systems, Information Labeling, Signal Control, Terrestrial and Satellite Distribution Systems, Real-Time Subscriber Billing Systems, Pay-Per-View, Parental Control and English Language Education. Block has multiple patent applications pending, including patents relating to interoperability of non-compatible radios, power metering and solar energy systems. Block’s inventions are licensed to most of the major consumer electronics manufacturers and have influenced entertainment, sports, and information and education services worldwide.

CONFERENCE LUNCH
Every day, 12:00 pm - 1:30 pm
Room: L011

KEYNOTE PANEL - II

Wellbeing Technologies of Taiwan: A TD Perspective

3:30 pm - 5:00 pm, Monday June 9
Room: A101

KEYNOTE PANEL - II

DISTINGUISHED SPEAKERS



Dr. James, Jhing-fa Wang
President
Tajen University, Pingtung, Tawan
Chair Professor, National Cheng
Kung University, Tainan, Taiwan

Prof. Jhing-Fa Wang is currently the President in Tajen University, Chair & Distinguished Professor in the Department of Electrical Engineering, National Cheng Kung University (NCKU). He got his bachelor and master degree from NCKU in Taiwan and Ph. D. from Stevens Institute of Technology USA in 1973, 1979 and 1983 respectively. He is the formal chair of IEEE Tainan Section in 2005-2009, the Coordinator of Section/Chapter, IEEE Region 10 in 2011-2012 & the Industry Liaison-Coordinator of IEEE Region 10 in 2009-2011. He was elected as IEEE Fellow in 1999 for his contribution on: “Hardware and Software Co-design on Speech Signal Processing”, He was also the general Chair of ISCAS 2009.

He received Outstanding Research Awards and Outstanding Researcher Award from National Science Council in 1990, 1995, 1997, and 2006 respectively. He also received Outstanding Industrial Awards from ACER and Institute of Information Industry and the Outstanding Professor Award from Chinese Engineer Association, Taiwan in 1991 and 1996 respectively. He also received the culture service award from Ministry of Education, Taiwan in 2008, Distinguished Scholar Award of KT Li from NCKU in 2009 & IEEE Tainan Section Best Service Award in 2011.

Prof. Wang was also invited to give the Keynote Speeches in PACLIC 12 in Singapore, 1998, UWN 2005 in Taipei, WirelessCom 2005 in Hawaii, IIH-MSP2006 in Pasadena, USA, ISM2007 in Taichung, PCM 2008 in Tainan, 2011 ICAST in

Dalian, China, 2011 ICSPCC in Xi'an, China & Keer2012 in Penghu, Taiwan respectively. He also served as an associate editor on IEEE Transactions on Neural Network and IEEE Transactions on VLSI System and Editor in Chief on International Journal of Chinese Engineering from 1995 to 2000.

Prof. Wang's research area is mainly on multimedia signal processing including speech signal processing, image processing, and VLSI system design. Concerning about the publication, he has published about one hundred & forty journal papers on IEEE, SIAM, IEICE, IEE and about three hundreds international conference papers since 1983.

Prof. Wang recently has explored the research on Orange Technology. Orange Technology refers to a newly evolved interdisciplinary research area for integration and innovation of health, happiness, and care technologies. The objective of Orange Technology is to bring more health, happiness and warming care to the society.



Dr. Daih-Huang Kuo
Vice President
Tajen University, Pingtung,
Tawan

Prof. Daih-huang Kuo is currently the Vice President in Tajen University, Professor in the Department of Pharmacy. He obtained his bachelor, master and Ph.D. degree from Chinese Medical University in Taiwan in 1986, 1988 and 1996. He received Outstanding Research Awards from Tajen University in 2011 and 2012 respectively. He also received Outstanding Awards from Ministry of Education R.O.C. in 2012 and 2013.

Prof. Kuo's research area was mainly on cardiovascular field especially in coronary artery. His current research is focused on functional food, pharmacology of traditional Chinese medicine, biological activity screening and safety assessment. Recently he developed the functional food in protection of artery and anti-oxidant for anti-aging. Concerning about the publication, he has published over thirty journal papers in 5 years and about eighty conference papers since 1996.

He held various works over twenty years, and led the school to perform quite a number of important programs, especially in teaching and research collaboration. He was a project leader or co-moderator in various research projects including "The Research and Development of Tropical Plants Essential Oil Related Products". It was a technology project from the Ministry of Economic Affairs in 2008-2011 (NT\$ 21 million).

The continuous Project is "Development of Industrial Technology on Functional Food and Relative Products of Essential Oil from Tropical Plants" in 2012-2015 (NT\$15 million).



Dr. Shyhnan Liou
Institute for Creative Industries
Design
National Cheng Kung University,
Tainan, Taiwan

Dr. Shyhnan Liou is currently an associate professor in the Institute of Creative Industries Design, National Cheng Kung University (NCKU). He got his bachelor, master degree and Ph. D. from department of Psychology in National Taiwan University in 1987, 1989 and 1999 respectively. He is also the consultant of the Center of Service System Technology in Industry Technology Research Institute (ITRI). He was a visiting scholar at Institute of Social Research and Department of Psychology at University of Michigan. He also was the CEO of the Research Center of Creativity, Innovation, and Entrepreneurship at NCKU. He have served as consultant for many research & development institutes include: Biomedical Technology Research & Development Institute in ITRI (2011), Metal Industries Research & Development Center(2007, 2011), Information Center for Industry Economics at ITRI(2003-2007), and Development Center of Biotechnology(2008, 2010). He was conference program chair of international conference of culture & creativity in 2010, 2011, 2013. He received Outstanding Phd dissertation award from NTU in 1989. Research Awards from National Chung Cheng University (CCU) in 2005. Excellent Teacher Award from CCU in 2009. After he joined NCKU in 1999, he received New Researcher scholarship from NCKU in 2010, and Best English teaching materials from NCKU in 2011.

Dr. Liou's research area is mainly on culture effect on creativity processing and team innovation, organizational innovation in R&D institutes, and transdisciplinary collaboration in integrative research. He have published two books on creativity and decision making, and about fifty journal papers, book chapters and international conference papers since 1999. Dr. Liou recently has join a international project on culture and life style with Nanyang University of Technology in Singapore. He also join the research project on the smart living technology (1999-2011) as well as Orange Technology (2010-). Orange Technology refers to a newly emerging interdisciplinary research on the integration and innovation of health, happiness, and care technologies, which led by the chair prof.

Wang Jhing-fa at NCKU. The objective of Orange Technology is to bring more health, happiness and warming care to the society.



Dr. Chun-Chia Kung
National Cheng Kung University,
Tainan, Taiwan

Prof. Kung graduated from the department of cognitive, linguistic, and psychological sciences at Brown University. After being a postdoctoral research associate in the department of psychology and the Princeton neuroscience institute, Princeton University, he joined the NCKU psychology department since 2008 fall. Dr. Kung's research interests include face and object recognition, functional neuroimaging (aka. fMRI) methodology, and issues on fundamental vision. Recently, along with the collaboration with faculties in other departments, Dr. Kung has also embarked on topics in neuroeconomics, neuropolitics, and neuroscience of happiness and subjective well-being.

CONFERENCE DINNER

Dr. Stephen J. H. Yang

6:30 pm - 9:00 pm, Monday, June 9

Room: Splendor II, 13F
Splendor Hotel



Dr. Stephen J. H. Yang
Director
Department of Information and
Technology Education,
Ministry of Education
Taiwan

Dr. Stephen J.H. Yang is the Director of Department of Information and Technology Education, Ministry of Education, Taiwan; he is also the Distinguished Professor of Computer

Science & Information Engineering, National Central University, Taiwan. Dr. Yang received his PhD degree in Electrical Engineering & Computer Science from the University of Illinois at Chicago in 1995. Dr. Yang has published over 80 journal papers, and received the 2010 outstanding research award from National Science Council, Taiwan. His research interests include creative learning, 3D virtual worlds, App software, and cloud services. Dr. Yang is very active in academic services. He is currently the Editors-in-Chief of the International Journal of Knowledge Management & E-Learning, and the Associate Editor of the International Journal of Systems and Service-Oriented Engineering. Dr. Yang also served as the Program Co-Chair of APTEL 2011, ICCE 2010, TELearn 2009, ICCE 2009, IEEE SUTC2008, ICCE 2008, IEEE ISM2008, SDPS 2008, IEEE W2ME2007, IEEE CAUL2006, and IEEE MSE2003.

TUESDAY June 10, 2014

KEYNOTE PANEL - III

The Importance of TD Education in Higher Education

8:30 am- 10:00 am, Tuesday, June 10
Room: A101

KEYNOTE PANEL - III DISTINGUISHED SPEAKERS



Dr. Jeffrey J. P. Tsai
President
Asia University
Taichung, Taiwan

Jeffrey J.P. Tsai received a Ph.D. degree in Computer Science from the Northwestern University, Evanston, Illinois. He is the President of Asia University, Taiwan. He was a Professor of Computer Science and the Director of the Distributed Real-Time Intelligent Systems Laboratory at the University of Illinois, Chicago, an Adjunct Professor at Tulane University, a Visiting Professor at Stanford University, a Senior Research

Fellow of IC2 at the University of Texas at Austin, and a Visiting Scholar at the University of California at Berkeley.

His current research interests include bioinformatics, ubiquitous computing, services computing, intrusion detection, knowledge-based software engineering, formal modeling and verification, distributed real-time systems, and intelligent agents. His research has been supported by NSF, NSC, DARPA, USAF Rome Laboratory, Department of Defense, Army Research Laboratory, Motorola, Fujitsu, and Gtech. Tsai authored Knowledge-Based Software Development for Real-Time Distributed Systems (World Scientific, 1993), Distributed Real-Time Systems (Wiley, 1996), Compositional Verification of Concurrent and Real-Time Systems (Springer, 2002), Security Modeling and Analysis of Mobile Agent Systems (Imperial College Press, 2006), Intrusion Detection: A Machine Learning Approach (Imperial College Press, 2010), and coedited Monitoring and Debugging of Distributed Real-Time Systems (IEEE Computer Society Press, 1995), Machine Learning Applications in Software Engineering (WSP, 2005), Ubiquitous Intelligence and Computing (Springer, 2006), Machine Learning in Cyber Trust: Security, Privacy, Reliability (Springer, 2009). From 2000 to 2003, he chaired the IEEE/CS Technical Committee on Multimedia Computing and served on the steering committee of the IEEE Transactions on Multimedia. From 1994 to 1999, he was an Associate Editor of the IEEE Transactions on Knowledge and Data Engineering and he is currently an Associate Editor of the IEEE Transactions on Services Computing. Tsai served as the Conference Co-Chair of the 16th IEEE International Symposium on Software Reliability Engineering, the 9th IEEE International Symposium on Multimedia, the 1st IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing, and the 3rd IFIP International Conference on Ubiquitous Intelligence and Computing.

He is currently the CoEditor-in-Chief of the International Journal on Artificial Intelligence Tools and Book Series on Health Informatics. Tsai has served on the IEEE Distinguished Speaker program, DARPA ISAT working group, and on the review panels for NSF and NIH. He received an Engineering Foundation Research Award from the IEEE and the Engineering Foundation Society, a University Scholar Award from the University of Illinois Foundation, an IEEE Technical Achievement Award and an IEEE Meritorious Service Award from the IEEE Computer Society. He is a Fellow of the AAAS, the IEEE, and the SDPS.

COFFEE BREAKS

Monday 9:30 am-10:00 am
Other days

10:00 am-10:30 am; 3:00 pm- 3:30 pm



Dr. Juan M. Sanchez
Vice President for Research
The University of
Texas at Austin, TX

Crisis in Higher Ed: What TD Education Needs to Fix



Dr. Yunus A. Çengel
Dean
Faculty of Engineering
Adnan Menderes University (ADU)
Aydin, Turkey

Recent Trends in Engineering Education: Inter-TD Perspective

Yunus Çengel is the Dean of the Faculty of Engineering at Adnan Menderes University ADU in Aydin, Turkey, and Professor Emeritus at the University of Nevada, Reno, USA. He received his Ph. D. in Mechanical Engineering in 1984 from North Carolina State University in USA. Before joining ADU in 2012, he served as the Dean of the Faculty of Mechanical Engineering at Yildiz Technical University YTU and as Advisor to President at Scientific and Technological Research Council TUBITAK. Prior to returning Turkey, he served as a faculty member at the University of Nevada, Reno UNR for 18 years and as the director of the Industrial Assessment Center at UNR for several years. He also served as the advisor to the Ministry of Energy and Natural Resources and the Ministry of National Education in Turkey on energy efficiency, energy policies, and education reform.

Professor Çengel is the author or coauthor of the widely adopted textbooks Thermodynamics: An Engineering Approach, Fundamentals of Thermal-Fluid Sciences, Heat and Mass Transfer: Fundamentals and Applications, Fluid Mechanics: Fundamentals and Applications, Introduction to Thermodynamics and Heat Transfer, and Differential Equations for Scientists and Engineers all published by McGraw-Hill. Some of his textbooks have been translated into Chinese, Japanese,

Korean, Thai, Spanish, Portuguese, Turkish, Italian, Greek, and French.

He is the recipient of several outstanding teacher awards, and he has received the ASEE Meriam/Wiley Distinguished Author Award twice. He is a registered Professional Engineer in the State of Nevada.



Dr. Annette L. Sobel
M.D., M.S., FAAFP, FASMA, P.E.
*Executive for Strategic Health
Security Initiatives
TTU & HSC School of Medical*

TD Education and Research in Healthcare

Dr. Annette Sobel currently is an Associate Professor in the Department of Medical Education and serves as the Executive for Critical Infrastructure Protection and Health Security Initiatives, TTUHSC and TTU, as well as Senior Advisor for Biosecurity Engagement at the Office of the Assistant Secretary of Defense (OTASD/NCB). She served as a Major General in the Arizona Air National Guard and as the Assistant to the Chief, National Guard Bureau, as well as the Chief's Advisor for Civil-Military Support during 9/11 and as the Homeland Security Director for the State of New Mexico from 2003-2005. She is residency trained in Family and Community Medicine and Aerospace Medicine and is a Hyperbaric Medicine Specialist, certified by the U.S. Navy. In addition, Dr. Sobel is a Human Factors Engineer, and her work has emphasized global disease surveillance, and development of novel, interactive learning and educational platforms to include development of "augmented reality" systems for learning disabilities. She supported the Defense Advanced Research Projects Agency (DARPA) for four years in a broad range of high risk/high pay off R&D to include bioinformatics, advanced algorithm development and telemedicine/virtual environments, and robotics, and mentored young scientists in the Defense Science Study Group. She was a Distinguished Member of the Technical Staff at Sandia National Laboratories, NM and is currently a Guest Scientist at Los Alamos National Laboratory, NM. Dr. Sobel was a Distinguished Member of the Technical Staff, Sandia National Labs, NM and an Army Astronaut Candidate in 1989. She serves on the World Federation of Scientists on a Permanent Monitoring Panel focused on prevention of planetary emergencies and countering acts of terrorism and has served on several National Academy of Science committees.

Dr. Sobel served in combat in Operation Just Cause, Panama, and supported Space Shuttle Operations at NASA-Dryden Test Flight Facility during Operation Desert Storm. She is trained as a military and civilian flight surgeon and was the Senior Flight Surgeon for the 57th MEDEVAC Detachment, Fort Bragg, N.C., responsible for all pre-hospital medical care and training. While serving in the military, Dr. Sobel was a member of an ambassadorial U.S. team intended to foster scientist-to-scientist collaborations with the former Soviet Union. She retired in 2008 after twenty years of military service.

Dr. Sobel served a triennium of service on the National Board of Directors of the Girl Scouts of the USA and was a member of the Board of Directors of the World Federation of Girl Guides and Girl Scouts and the GSUSA National Science Technology Engineering and Math Advisory Board. She continues to support Boy and Girl Scouts in STEM outreach programs. She is the recipient of the Anti-Defamation League's Distinguished Public Service Award and NATO recognition for a lifetime of service devoted to understanding the science of weapons of mass destruction.

KEYNOTE PANEL - IV
Society-Humanity-Science (SHS)
Program : TD Education in Taiwan
10:30 am- 12:00 pm, Tuesday, June 10
Room: A101

KEYNOTE PANEL - IV DISTINGUISHED SPEAKERS



Dr. Jwu-Ting Chen
*Professor
Department of Chemistry,
National Taiwan University,
Taipei, Taiwan*

Dr. Jwu-Ting Chen is the full Professor of Department of Chemistry, NTU since 1991. He is also the founder and the Director of the Center for the Advancement of Science Education (CASE) since 2008. He is the chief PI for the "Trans-Disciplinary Education on Society-Humanity-Science — Cul-

tivating Cross-Boundary and Communication Competence in Universities/Colleges", also abbreviated as SHS Program.

He had his B.S. from Department of Chemistry, NTU in 1973. He went to USA in 1975 to have his graduate study in chemistry in U. Cincinnati, OH. He finished his M.S. and moved to ISU, IA in 1977, and earned his Ph.D. there in 1982. In 1982-1986, he worked as a postdoctoral research fellow at Penn State U., PA. In 1986, he joined the Department of Chemistry, NTU as an associate professor, and was promoted to the full professor in 1991. He had been on visiting in Louis Pasteur U., Strasbourg, France in 1995; and National Dong-Hwa U., Taiwan in 1998; ICR Kyoto U, Japan in 2013. He served as the Director of Chemistry Research Promotion Center, NSC in 1999-2002. For the international service, he has been on the advisory board of J. Organometallic Chem. in 1999-2003. He was the Chairman of the XXIV International Conference on Organometallic Chemistry in 2010.

He has been awarded twice by the National Science Council for the distinguished research achievement in chemistry in 1994 and 1996, and the winner of the copper medal of Dr. Li K.-T. Award for popular science writing in 1997. He was twice awarded for outstanding teaching in NTU in 1999 and 2008. He was awarded for distinguished service for Chinese Chemical Society in 2013.



Dr. Chia-Liang Cheng
*Vice President
Professor
Department of physics,
National Dong Hwa University,
Hualien, Taiwan*

Chia-Liang Cheng is a professor in the Physics Department, and Vice President of National Dong Hwa University (NDHU), Hualien Taiwan. He received his Ph. D. degree from the Physics Department of the University of Oregon, USA in 1993. After obtaining his Ph.D. degree, he was a post-doc with Prof Y.T. Lee (Nobel Laureate in Chemistry, 1986) at the Chemistry Department in the University of California, Berkeley and Institute of Atomic and Molecular Sciences, Academia Sinica, Taipei from 1994-1997. He was an assistant professor at Physics Department of the National Taiwan Normal University for one year, and then he joined NDHU in 1998. In 2005, he was promoted full professor. He is specialized in spectroscopy, and optical imaging. Currently, he is the Vice President of NDHU.

His research interests are in Bio/medical applications of nanodiamond; Spectroscopic studies on nanomaterial;

visible-light-activated TiO₂ nanoparticles; Infrared, Raman spectroscopy, etc. His interests go beyond the boundary of physics, chemistry, biology and medicine. His group is one of the pioneering groups in the world to successfully use nanodiamond as a biological marker to observe bio molecules interaction with cells or bacteria. They have recently delivered anticancer drug using nanodiamond as a delivery vehicle into lung cancer tumors in the animal model. He has been giving invited lectures in almost all the important diamond research conferences.

He has been the Director of General Education (2002-2005); Chairman of the Physics Department (2005-2008); Dean of the Committee for General Education (2008-2012). He has also served in various professional Program Committees, such as the International Conference on Raman Spectroscopy; the International Conference on Diamond and Carbon Materials (2009-); Review member of the Physics panel, National Science Council in Taiwan (NSC, 2008-2010); Panel Member, Physic Research Promotion Center, Taiwan (PRPC, 2007- 2010); Committer Member, Physical Society of the Republic of China, Taiwan (PSROC, 2005-2009). He also serves as a reviewer for more than 30 SCI journals. He also has joint research project with the Moscow State University (Taiwan-Russia, Moscow State U.) and with French teams (Taiwan- France, CEA).



Dr. Chung-I Lin
*President of
Taiwan Philosophical Association
and
Dean of College of Humanities
and Social Sciences of
Taipei Medical University*

Chung-I Lin was born in 1964 in Taiwan. He received his BA in Social Work from Fu Jen Catholic University (1987), MA in Philosophy from National Chengchi University (1993) and Ph.D. in Philosophy from the University of Iowa (1999).

He has held teaching and research positions at the national Chengchi University (NCCU) and Taipei Medical University (TMU). He also has held a number of administrative posts in Taiwan including CEO of the Office of Chengchi College (NCCU), Director of Center of General Education, NCCU, Director of Project of National General Education Resource Platform, Ministry of Education (MOE), Director of the Center of Teaching and Learning Development, NCCU, Chief Director of the Project of National General Education Reform, MOE, Chief Director of the General Education Accreditation and Evaluation Project Office, MOE, and Head of the Graduate Institute of Humanities in Medicine, TMU.

He is presently President of Taiwan Philosophical Association and Dean of College of Humanities and Social Sciences of TMU. His recent research interests are Philosophy of Mind, Philosophy of Language and Chinese Philosophy.

KEYNOTE PANEL - V

Experiences of TD Education in Other Part of the World

1:30 pm- 3:00 pm, Tuesday, June 10
Room: A101

KEYNOTE PANEL - V

DISTINGUISHED SPEAKERS



TD Education in Europe and South Africa



Dr. Cristina Núñez-Madrado
*Director of the Center for
EcoLiteracy and Dialogue of
Knowledges & Director of the
Doctoral Program in
Transdisciplinarity Studies
Universidad Veracruzana,
Xalapa, Veracruz, México*

TD Education in Mexico

Dr. Cristina Núñez is professor & director of the Doctoral Program in Transdisciplinarity Studies at the Center for EcoLiteracy and Dialogue of Knowledges at the Universidad Veracruzana. She is part of the founding team of this Center where she coordinated the Master in Transdisciplinarity Studies for Sustainability since 2008. She studied Economics at the National University of Mexico and a Master and PhD in Anthropologies Sciences. She has been professor in Economic and Sociology Schools at the Universidad Veracruzana for

more than 15 years. She is author of some books and papers in anthropology, politics and culture of peasant societies in central Veracruz. The most representative books she has written: "Ejido, caña y café. Política y cultura campesina en el Centro de Veracruz" and "Migración Internacional, crisis agrícola y transformaciones culturales en la región central de Veracruz". As ethnologist she has extensive experience in narrative methods within a transdisciplinary perspective. Núñez's research work has been recognized by many national awards: National Award Fray Bernardino de Sahagún given by the National Institute of Anthropology and History and National Reward in Agrarian Studies. She is member of the International Center of Transdisciplinary Research (CI-RET), France.



Dr. Hiroshi Yamaguchi
*Professor
Research & Development
Initiative
Chuo University, Tokyo, Japan*

TD Education in Japan

Dr. Hiroshi Yamaguchi received his B.S. degree in Instrumentation Engineering from Keio University and the Dr. Eng. degree in information Security from Chuo University in Japan. He originally joined NEC Corporation in 1963, in the Computer Software Development Department and has served as the vice president in NEC Soft. LTD. He was a Director of the basic operating systems of a super computer, large scale computer and personal computer. He also pioneered the Information Security Research Institute and the collaboration with the Universities in the USA. He worked as a head of the research and development team on the next generation electronic voting system funded by the Ministry of Economy, Trade and Industry (METI) in Japan. He was serving as a Visiting Professor in the Bioinformatics Research Institute, Waseda University, Japan since 2004. Currently he is serving as a Full Professor in the Research and Development Initiative, Chuo University, Japan. He served as a President of Software Engineering Society (The SES), and currently serving the research fellow of the Society of Development and Process Science (The SDPS) and a Vice President of Academy of Transdisciplinary Learning & Study Studies (The ATLAS). He is currently engaged in the research project funded by the National Institute of Information and Communication Technology (NICT). He is currently working as a subdirector

of the Melt-up Forum participated from Japanese Government, major IT vendors in Japan. His research interests focus upon the cryptographic theory, modern logic cryptology and cognitive science. He received the best paper award on information sharing on DOD 14th ICCRTS, 2009. He has been a keynote at several international conferences, such as IEEE-ICTAI, HASE, IEEE-BIBE, SDPS, and IEEE-ISM.



Dr. Atila Ertas
*Professor and Director of
 Academy of Transdisciplinary
 Studies.
 Department of Mechanical
 Engineering
 Texas Tech University*

TD Education in USA at Texas Tech University

Dr. Atila Ertas, Professor of Mechanical Engineering, received his masters and Ph.D. from Texas A&M University. He had 12 years of industrial experience prior to pursuing graduate studies. Dr. Ertas has been the driving force behind the conception and the development of the transdisciplinary model for education and research. His pioneering efforts in transdisciplinary research and education have been recognized internationally by several awards. He is a Senior Research Fellow of the ICC2 Institute at the University of Texas Austin, a Fellow of American Society of Mechanical Engineers(ASME), a Fellow of Society of Design and Process Science (SDPS), and a Fellow and honorary member of The Academy of Transdisciplinary Learning & Advanced Studies (TheATLAS). He is also an honorary member of International Center for Transdisciplinary Research (CIRET), France.

Dr. Ertas has earned both national and international reputation in engineering design. Dr. Ertas is the author of a number of books, among them: A. Ertas, and J. C. Jones, *The Engineering Design Process*, John Wiley & Sons, Inc., first addition 1993 and second edition 1996; A. Ertas, *Prevention through Design (PtD): Transdisciplinary Process*, funded by the National Institute for Occupational Safety and Health, 2010; A. Ertas, *Engineering Mechanics and Design Applications, Transdisciplinary Engineering Fundamentals*, CRC Press, Taylor & Francis Group, 2011; A. Ertas (editor), *Transdisciplinarity: Bridging Natural Science, Social Science, Humanities & Engineering*, TheATLAS Publications, 2011; B. Nicolescu and A. Ertas (editors), *Transdisciplinary Theory and Practice*, TheATLAS Publications, 2013. He has edited more than 35 conference proceedings.

Dr. Ertas' contributions to teaching and research have been recognized by numerous honors and awards. The honors and awards include: 1994 Industrial Technology National Award from US Department of Energy; President's Academic Achievement Award; President's Excellence in Teaching award (he is a member of the Texas Tech Teaching Academy); Pi Tau Sigma Best Professor Award; Pi Tau Sigma Outstanding Teaching Award; Halliburton Award in recognition of outstanding achievement and professionalism in education and research; College of Engineering Outstanding Researcher Award; George T. and Gladys Hanger Abell Faculty Award for overall excellence in teaching and research; and He also received the most prestigious SDPS George Kozmetsky Distinguished Achievement Award and Excellence in Leadership. He received ATLAS Gold Medal of Honor in January 2012. Most recently, he was recognized as one of the distinguished former students of Texas A&M, Mechanical Engineering Department. He has published over 150 scientific papers (64 journal papers) that cover many engineering technical fields. He has been PI or Co-PI on over 40 funded research projects. Under his supervision 194 MS and Ph.D. graduate students have received degrees.

PLENARY TALK-4
Prof. Ji Ping Chang
3:30 pm- 4:00 pm, Tuesday, June 10
Room: A101



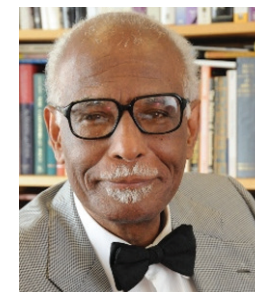
Professor Ji Ping Chang
*Fudan University
 Shanghai, China*

Ji Ping Chang is an industrial design professor with over 20 years of industry experience across the U.S., Europe and Asia. She has worked as a product designer/design manager for Nike, DuPont, JC Penney, Philips, Conran Design Group and GE-Appliance Asia. In 2003, she relocated to Shanghai and helped found the Shanghai Institute of Visual Arts at Fudan University. Ji Ping has been teaching collaborative courses in Design Research, Visual Communication, Sustainability and Design for the Majority since 2008.

In 2010, Ji Ping Chang was selected a "hero" by the BBC documentary series "Heroes of Heritage". Where her student exhibit was positioned as the future of the cultural heritage of a historical town called Ci Cheng dated back 1,500 years. The link to the BBC documentary is listed below:
http://v.youku.com/v_show/id_XMTk10DA1NzA4.html

The latter half of the documentary covers a Sino-American joint student exhibit, which is the results of a collaborative multicultural design course across two universities— Shanghai Institute of Visual Arts at Fudan University in China and San Jose State University in California—students came together to innovate with the underprivileged in mind. This project gave next-generation designers from the East and West a chance to learn from each other and address issues of social responsibility.

PLENARY TALK-5
Dr. Winston E. Langley
4:00 pm-4:30 pm, Tuesday, June 10
Room: A101



Dr. Winston E. Langley
*Provost and
 Vice Chancellor for
 Academic Affairs
 University of Massachusetts
 Boston*

Provost and Vice Chancellor for Academic Affairs Winston E. Langley is the senior administrator in charge of advancing the University of Massachusetts Boston's academic mission and the quality of its intellectual life.

A scholar with a rich, diverse academic background and a seasoned administrator, he has been instrumental in defining and developing UMass Boston's identity as a student-centered, urban public research university with a teaching soul.

A professor of political science and international relations since 1982, Dr. Langley served as director of the International Relations Program, senior associate provost, associate chancellor, and interim provost and vice chancellor for academic affairs before he was named to his current position in 2009.

Dr. Langley's scholarly interests include human rights, alternative models of world order, religion, and politics. His research has focused on the inadequacy of the nation-state

system, the weakness of intergovernmental organizations (including the United Nations), nongovernmental organizations' expanding power and influence, and the paucity of alternative models for global ordering.

Dr. Langley is the author of *Kazi Nazrul Islam: The Voice of Poetry and the Struggle for Human Wholeness* and the *Encyclopedia of Human Rights Issues Since 1945*, which won the Choice Outstanding Academic Book Award. He is the editor of *Human Rights: The Major Global Instruments* and (with Vivian Fox) *Women's Rights in the United States*, which won the Gustavus Myers Center for the Study of Bigotry and Human Rights Award for Outstanding Book on Human Rights in North America. He is a member of the American Society of International Law and a reviewer of nine publications, including *New Political Science*, *Transnational Perspectives*, and *International Journal of African Studies*. Dr. Langley earned a bachelor of arts in biology from Atlantic Union College, a master of arts in European diplomatic history and a doctor of philosophy in political science and international relations from Howard University, and a doctor of laws from Suffolk University.

PLENARY TALK-6

Dr. Sukanta Ganguly

4:30 pm - 5:00 pm, Wednesday June 11
Room: A101



Dr. Sukanta Ganguly
*Chief Technology Officer &
Head of Products
QuickPay Corp
San Jose, CA*

Unified Data Protection Strategies for Hybrid Cloud Environment

Dr. Sukanta Ganguly is a technocrat and has been an entrepreneur forming new businesses. He has taken ideas from concept to a product with go-to-market business planning and revenue modeling for several businesses.

He has a Doctorate in Engineering from Texas Tech University in Transdisciplinary area with concentration in the Semantic searching, Data-mining with Context-aware information retrieval. He has an MBA in Finance and a Masters in Computer

Science. He has published three books and many academic papers and has been granted several patents.

Dr. Ganguly has 20 years of industry experience. He focuses in the areas of Network & Data Security, Data/Information mining, multi-media protocols and model driven applications.

ATLAS SPECIAL EVENT

RECEPTION HONORING

Dr. BASARAB NICOLESCU

**Creating Collaboration and Building
an International TD Community**

7:30 pm- 9:30 pm, Tuesday, June 10
Splendor Hotel



Dr. Basarab Nicolescu
*Member of the
Romanian Academy,
President, International
Center for Transdisciplinary
Research and Studies (CIRET)
France*

Over the past four decades, Professor Basarab Nicolescu has made pioneering contributions to our understanding of transdisciplinarity. With this conference we will be honoring Professor Basarab Nicolescu for his historical contribution to transdisciplinarity. ATLAS will support a reception on Tuesday night, June 10, 2014. You are invited for the celebration.



WEDNESDAY
June 11, 2014

KEYNOTE PANEL - VI

**The New
Entrepreneurship**

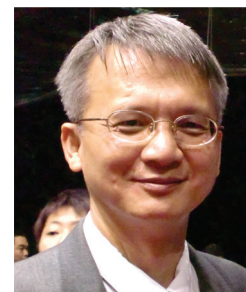
8:30 am- 10:00 am, Wednesday, June 11
Room: A101

KEYNOTE PANEL - VI DISTINGUISHED SPEAKERS



Bob Block
*Founder and the First Chairman
of the United States Sports
Academy and
Founder and Managing
Partner of LiTricity*

Everything is Connected to Everything



Dr. Ko-Chen Wu
*Professor
Department of Business
Administration, National Taiwan
University of Science and
Technology*

Spirituality in Business Education

Dr. Ko-Chen Wu is a professor of the Department of Business Administration, National Taiwan University of Science and Technology. He received his Ph.D. in Operations Re-

search and Management Science from University of California, at Berkeley, Berkeley, California, 1991.

Dr. Wu's management experiences include: Chairman, Life Care Center, National Taiwan University of Science and Technology (2010-2013); Chairman, Department of Business Administration, National Taiwan University of Science and Technology (2007-2011); Chairman, Graduate Institute of Finance, National Taiwan University of Science and Technology (2007-2009); Senior Executive Training Program of National Academy of Civil Service (2012); Senior Executive



Dr. Randolph T. Yeh
Chairman
New Path foundation

Bridging the Divide with Accompaniment

Dr. Yeh is chairman of New Path Foundation. He received his Ph.D. in Computer Science from Department of the University of Texas at Austin, 1978.

Dr. Yeh's previous management experiences include Corporate Officer of AT&T, CEO of AT&T Taiwan Telecommunications, Inc., and Chairman & CEO of Lucent Technologies (China) Inc. He turned his interests towards social services and cofounded New Path Foundation in 1999. Since 2000, Dr. Yeh has devoted himself to the development of long term accompaniment services for lonely elders and disadvantaged youth in Beijing, Delhi, and Houston.



Dr. I-En Liao
Professor and Chair,
Department of Computer
Science and Engineering ,
National Chung Hsing University,
Taichung, Taiwan

Dr. I-En Liao received his Ph.D. degree in Computer and Information Science from Ohio State University, Columbus, Ohio. He is currently a Professor and the Chair of Department of Computer Science and Engineering at National Chung Hsing University, Taichung, Taiwan. Dr. Liao's research interests include data mining, recommender systems, XML technologies, and big data analytics. He published about 30 journal papers and 60 conference papers, and received three best paper awards. He also led student teams to won several software design competitions including the championship of 2013 XBRL (eXtensible Business Reporting Language) Software Design Competition hosted by Taiwan Stock Exchange Corporation.

In addition to academic activities, Dr. Liao also involved in many social movements in Taiwan. He came back to Taiwan in 1990 and pushed for the creation of Taiwan Association of University Professors (TAUP) at the end of that year. He served as the Secretary General of TAUP from 1990-1991 and led social movements advocating the abolishment of criminal laws that were used to oppress people against the ruling party. His efforts together with those of many Taiwanese people resulted in the abolishment of criminal laws that violate human rights. In 1992, political prisoners were released from jail, and the black lists for those spoke out against the government were lifted. After that, Taiwan transformed into a democratic society in an unprecedented pace.



Dr. Chu-Sing Yang
Department of Electrical
Engineering
National Cheng Kung University
Tainan, Taiwan

Chu-Sing Yang is a Professor of Electrical Engineering in the Institute of Computer and Communication Engineering at National Cheng Kung University, Tainan, Taiwan. He re-

ceived the B.Sc. degree in Engineering Science from National Cheng Kung University in 1976 and the M.Sc. and Ph.D. degrees in Electrical Engineering from National Cheng Kung University in 1984 and 1987, respectively. He joined the faculty of the Department of Electrical Engineering, National Sun Yat-sen University, Kaohsiung, Taiwan, as an Associate Professor in 1988. Since 1993, he has been a Professor in the Department of Computer Science and Engineering, National Sun Yat-sen University. He was the chair of the Department of Computer Science and Engineering, National Sun Yat-sen University from August 1995 to July 1999, and the director of the Computer Center, National Sun Yat-sen University from August 1998 to October 2002. He was the Program Chair of ICS-96 and Program Co-Chair of ICPP-2003 and MTPP-2010. He joined the faculty of the Department of Electrical Engineering, National Cheng Kung University, Tainan, Taiwan, as a Professor in 2006. He participated in the design and deployment of Taiwan Advanced Research and Education Network and served as the deputy director of National Center for High-performance Computing, Taiwan from January 2007 to December 2008. His research interests include network security, network virtualization, cloud computing, multi-core embedded system, smart grid, digital home, and intelligent computing.



Dr. Yuh-Jye Lee
Department of Computer Science
and Information Engineering
National Taiwan University of
Science and Technology
Taiwan

Dr. Yuh-Jye Lee received the PhD degree in Computer Science from the University of Wisconsin-Madison in 2001. He is an Associate Professor of Department of Computer Science and Information Engineering at National Taiwan University of Science and Technology. He also serves as a principal investigator at the Intel-NTU Connected Context Computing Center. His research is primarily rooted in optimization theory and spans a range of areas including network and information security, machine learning, data mining, big data, numerical optimization and operations research. During the last decade, Dr. Lee has developed many learning algorithms in supervised learning, semi-supervised learning and unsupervised learning as well as linear/nonlinear dimension reduction. His recent major research is applying machine learning to information security problems such as network intrusion

KEYNOTE PANEL-VII **Cyber-Security in a "Cloudy Sky"** **A TD Perspective**

10:30 am- 12:00 pm, Wednesday, June 11
Room: A101

KEYNOTE PANEL - VII **DISTINGUISHED SPEAKERS**

detection, anomaly detection, malicious URLs detection and legitimate user identification. Currently, he focuses on online learning algorithms for dealing with large scale datasets, stream data mining and behavior based anomaly detection for the needs of big data and machine to machine communication security problems.

PLENARY SESSION - II Innovation via TD Means

1:30 pm- 3:00 pm, Wednesday, June 11

Room: A101

PLENARY TALK- 7 Dr. Jay Xiong

1:30 pm- 2:00 pm, Wednesday, June 11

Room: A101



Dr. Jay Xiong
President
NSE software, LLC
USA

Nonlinear Software Engineering Paradigm

Jay Xiong, a US citizen, is the President of NSE software, LLC, USA (reorganized from International Software Automation, Inc., USA) and the President of ISA Shanghai, Ltd. He is the inventor of nonlinear software engineering paradigm (NSE) based on complexity science (<http://www.springer.com/physics/complexity/book/978-1-4419-7325-2>).

Trained at Zhong Shan University and in integrated circuit design at the Chinese Academy of Science, Jay Xiong invented the "Shortest Path Routing Algorithm Using Wave Diffraction" at the Hitachi Research Center in Japan. This major technical achievement brought him to the University of California, Berkeley as the foremost Chinese scientist in the Computer Aided Integrated Circuit Layout Project jointly sponsored by The National Science Foundation of the United States and the Chinese Academy of Science. He turned his research to

software engineering automation and established Advanced Software Automation, Inc. (ASA) in 1989 and International Software Automation, Inc. (ISA) in 1992 in Silicon Valley. He is the designer of ASA's Hindsight and ISA's Panorama products.

PLENARY TALK- 8 Dr. Yunus Cengel

2:00 pm- 2:30 pm, Wednesday, June 11

Room: A101



Dr. Yunus A. Cengel
Dean
Faculty of Engineering
Adnan Menderes University (ADU)
Aydin, Turkey

2nd Law as the 2nd Dimensions of Existence: TD Perspective

PLENARY TALK- 9 Dr. Pamela heckel

2:30 pm- 3:00 pm, Wednesday, June 11

Room: A101



Dr. Pamela Heckel
Former Project Officer
National Institute for
Occupational Safety and Health

Protecting Human Capital through the Intersection of Architecture, Engineering and Worker Safety

Pamela Heckel, Ph.D., P.E. is the former Project Officer for the Prevention through Design Initiative at the National In-

stitute for Occupational Safety and Health. She earned the doctorate in environmental engineering in 2007 from the University of Cincinnati. Her doctoral research used a terrestrial insect as a surrogate for human, occupational exposure to ambient mercury. She developed a novel, complex air pollutant dispersion model to predict ambient concentrations along roadsides. She conducted epidemiological research studies and modeled occupational exposures to mercury during a post-doctoral fellowship in the College of Medicine. In addition to the doctorate in engineering, she has undergraduate engineering degrees from Vanderbilt and Purdue, a Master's in Architecture and is a registered engineer in Ohio.

Prior to NIOSH, Dr. Heckel's work experience includes design and manufacturing of nuclear reactors and construction of nuclear containment facilities. She designed a laminar drill platform used to manufacture the stainless steel internal structure of a nuclear reactor. She worked as a field engineer on the Trans-Alaska Pipeline where she managed the steel yard and supervised a union crew of Boilermakers, Teamsters and Operators. She was a pioneer in developing computerized inventory-control systems at Boeing and later worked on the Customer Engineering Sales Support team for the 737. At General Electric, she performed life cycle analysis on the CFM56 engines that power the 737 aircraft and wrote the LM1600 engine test manual. She supervised the contract employees from Essig Research. This year, she joined the Board of the international Air & Waste Management Association. Dr. Heckel applied for patents on two Type II medical devices: an ergonomic grip and a device to treat hammertoes. In addition to journal publications and conference presentations, she has published a play (Uncle Doc), two textbooks (Putting People First – the Theory of Universal Design and Environmental Mercury Exposure of Terrestrial Life Forms), and musical scores for Psalms 1 & 2. She is the President and CEO of the Five Minute Church, Inc. a web-based ministry. Dr. Heckel and her husband Walter recently celebrated their Silver Wedding Anniversary. They have four adult children.

ATLAS SPECIAL EVENT

RECEPTION HONORING

Dr. BASARAB NICOLESCU

7:30 pm- 9:30 pm, Tuesday, June 10
Splendor Hotel

KEYNOTE PANEL - VIII

Education for Trans-cultural Design

3:30 pm- 5:00 pm, Wednesday, June 11

Room: A101

KEYNOTE PANEL - VIII DISTINGUISHED SPEAKERS



Dr. XI Youmin
Executive President
Jiaotong-Liverpool University
Xi'an Jiaotong
Liverpool University
Suzhou, China

Professor XI Youmin was appointed Executive President of Xi'an Jiaotong-Liverpool University, Pro-Vice-Chancellor of University of Liverpool in August 2008. As a visiting professor, he has conducted joint research projects and discourses in universities in Canada, Singapore, Hong Kong, and Taiwan. His research and teaching areas cover strategic management and policy analysis, decision-making and decision support system, leadership and organization behaviour, etc. He put forward a theory: Harmony Theory in 1987 and extended it to HeXie Management Theory. Professor Xi has successfully supervised over 100 Master and PhD students and gained many important research funds from the National Natural Science Foundation of China (NSFC) and central and local governments as well as industrial sector. As author or co-author, he has published more than 300 academic papers and 20 books. He has received over ten prizes at provincial or ministerial or national levels and was awarded National Young and Middle Age Experts with Distinguished Contributions, Prize of Science and Technology for Chinese Youth as well as Prize for Chinese Young Scientists. Professor Xi completed an ME in system engineering in 1984 and in 1987 he was the first awarded PhD degree in the field of management engineering in mainland China. Currently, he is the PI of two key NSFC research projects, indigenous leadership study and Chinese indigenous management theory study and also leads a team to study "students and learning centred education" supported by The Ford Foundation.



Dr. Thomas Fisher
Director
Design Research Institute
Xi'an Jiaotong
Liverpool University
Suzhou, China

Thomas Fischer is the Director of the newly-established Design Research Institute at Xi'an Jiaotong-Liverpool University in Suzhou, China, where he works as an Associate Professor, teaching Architecture as well as Industrial Design. Thomas is a Fellow of the Design Research Society and received the American Society for Cybernetics' Warren McCulloch Award in 2011. Thomas holds a PhD in Education from the University of Kassel in Germany and one in Architecture and Design from RMIT University in Australia. Thomas previously researched and taught at the School of Design at The Hong Kong Polytechnic University as an Assistant Professor and as the Discipline Leader of Product and Industrial Design. He was a Visiting Associate Professor at the College of Planning and Design at National Cheng Kung University in Taiwan from early 2010 to mid-2011. Thomas' research is focused on computer-aided architectural design, on cybernetics as well as on design education in China and in Sino-foreign contexts. His expertise and contributions in these areas are concerned with the relationships between Chinese and Western philosophical traditions as well as with the relationships between formal and informal approaches to design.



Dr. Derrick Tate
Founding Head of
Industrial Design Department
Xi'an Jiaotong
Liverpool University
Suzhou, China

Derrick Tate is an Associate Professor and Founding Head of the Department of Industrial Design at Xi'an Jiaotong-Liverpool University. He aims to impact society through bringing design thinking to areas of strategic importance: assessing the innovative potential of design ideas, developing sustainable approaches for building systems, transportation, and manufacturing; and broadening participation in innovation. Dr. Tate has carried out his research activities at the two ends of the research spectrum where they will have the greatest impact: fundamental research that provides a science base

for the future of entrepreneurial engineering design as well as the application of design theories and tools to technology innovation. His recent projects include working with West Texas entrepreneurs on the development of innovative and sustainable designs and a US-Tanzania Workshop: Advancing the Structural Use of Earth-based Bricks, funded by NSF. He received a B.S. in Mechanical Engineering degree from Rice University. His S.M and Ph.D. degrees in Mechanical Engineering are from MIT in the areas of manufacturing and design, respectively.

THURSDAY
June 12, 2014

PLENARY SESSION - III Social Transformation through T3

8:30 am- 10:00 am, Thursday, June 12

Room: A101

PLENARY TALK- 10 Dr. Marilyn Schlitz

8:30 am- 9:00 am, Thursday, June 12

Room: A101



Dr. Marilyn Mandala Schlitz
Ambassador for Creative
Projects and Global Affairs,
Institute of Noetic Sciences.
Senior Scientist, Research
Institute, California
Pacific Medical Center

Worldview Exploration: A Transformational Curriculum to Discover Yourself, Inspire Others, and Engage the World.

Marilyn Schlitz, Ph.D. is a social anthropologist, researcher, writer, and charismatic public speaker. She is currently the Founder and CEO of Worldview Enterprises. She also serves

as President Emeritus and a Senior Fellow at the Institute of Noetic Sciences. Additionally, she is a Senior Scientist at the California Pacific Medical Center, where she focuses on health and healing, and board member of Pacifica Graduate Institute. For more than three decades, Marilyn has been a leader in the field of consciousness studies. Her research and extensive publications focus on personal and social transformation, cultural pluralism, extended human capacities, and mind body medicine. She has a depth of leadership experience in government, business, and the not-for-profit sectors. Her broad and varied work has given her a unique ability to help individuals and organizations identify and develop personal and interpersonal skills and capacities needed by 21st century leaders. She is currently producing a feature film (called *Death Makes Life Possible*) with Deepak Chopra on the topic of death and dying, and how engaging that topic in a deep and meaningful way informs the way we live our lives.

PLENARY TALK- 11

Lily Yeh

9:00 am- 9:30 am, Thursday, June 12

Room: A101



Lily Yeh

Founder of Barefoot Artists, Inc.

Art as a Transformational Tool

Lily Yeh is an internationally celebrated artist and award-winning founder and former executive and artistic director of the Village of Arts and Humanities. Since 1986, with the help of neighborhood children and adults, Yeh has built the Village from an abandoned lot into an organization and a community. She has infused the Village with her own artistic sensitivity and vision, collaborating with other artists and community residents to create a place that brings art into both the physical space and daily rhythms of life. Expanding beyond North Philadelphia, Yeh's work has taken her to communities in other parts of the country as well as abroad.

Born in Kueizhou China, Yeh studied traditional Chinese painting in Taiwan before coming to the United States in

1963. In 1968, she began teaching at the University of the Arts where she became professor of painting and art history. In 1998, she resigned from her tenured position to devote all her time to her work at the Village of Arts and Humanities. Under her leadership as founder, executive director and lead artist from 1968 to 2004, the Village has become a national model of community building through the arts. In the last five years of her tenure there, the Village has received several national awards including Coming Up Taller Award from the President's Committee on Arts and Culture and the National Endowment for the Arts, Washington, D.C. in 2000 and the gold medal Rudy Bruner Award for Urban Excellence from Bruner Foundation in Cambridge, MA. In 2003, the Village received a Commonwealth of Pennsylvania Governor's Award for Environmental Excellence. In the same year, Yeh received the prestigious "Leadership for the Changing World" Award from the Ford Foundation. In 2007, the Village is being honored with Champion in Action Award by Citizens Bank for its building community through the arts effort.

In 2004, Yeh left the Village to pursue her work internationally. She formed a new non-profit organization, Barefoot Artists, Inc., with the mission to bring the transformative power of art to the most impoverished communities in the world through participatory and multifaceted projects that foster community empowerment, improve the physical environment, promote economic development, and preserve indigenous art and culture. Yeh has conducted lectures, workshops and land transformation projects in many places in the world. Her current work, the Rwanda Healing Project, includes the construction of the 1994 Genocide Memorial and the transformation of a survivors village in the Rugerero district in West Rwanda. It has won her the SEG (Society for Environmental Graphic Design) 2006 Design Award and the Earth Movers Award from Natural Home Magazine in 2007. Yeh's work has impacted people and places in China, Columbia, Ecuador, Ghana, Italy, Ivory Coast, Kenya, the Republic of Georgia, Rwanda and the United States.

PLENARY TALK- 12

Jeremy Liu

9:30 am- 10:00 am, Thursday, June 12

Room: A101



Jeremy Liu

*Managing Principal and
Co-Founder of Creative
Development Partners (CDP)*

Mr. Jeremy Liu is the Co-Founder of Creative Development Partners (CDP) and serves as its Managing Principal. Mr. Liu is responsible for setting strategic priorities for CDP and directing management, investor relations, and development activities.

Mr. Liu is an experienced real estate developer and chief executive with a unique background in urban and community planning, environmental planning and permitting, affordable and mixed-income housing, commercial real estate, creative placemaking/arts and cultural planning, and technology development.

He previously served as the executive director of two nationally-recognized community development corporations that focused on housing and commercial real estate development and management as well as community economic development. He has overseen multiple business lines, 110+ staff and a budget of \$10 million in annual revenue and more than \$150 million in assets. He also designed and raised initial capital for the first real estate investment fund to be screened for positive social determinants of health impacts.

He is also a Co-Founder and Principal of Creative Ecology Partners (CEP), an affiliate of CDP that serves as a design studio and incubator for urban, economic and community development innovation. Liu has written and lectured in the US and abroad about participatory planning, housing and real estate development, the role of technology in urban planning and community development, and he regularly writes for *Rooflines*, the housing and community development blog for Shelterforce Magazine, a publication of the National Housing Institute. He has served on review panels for the National Endowment for the Arts, the National Endowment for the Humanities, the National Science Foundation, the New England

CONFERENCE DINNER

Monday, 6:30 pm - 9:00 pm

June 9, 2014

Splendor Hotel

Foundation for the Arts, the San Francisco Arts Commission and ArtPlace. He has received an Artadia Artist Prize, a Visible Republic Artist Grant, LEF Foundation Contemporary Work Fund and Creative Work Fund grants. He has also led participatory arts- and technology-based community development projects in the US and Asia.

Mr. Liu is a Board Member of The Center for Neighborhood Technology, The New England Foundation for the Arts, and the Interaction Institute for Social Change. He is also a Board Member of the I-GO Car Sharing, recently sold to Enterprise Rental Car. Mr. Liu is a graduate of Tufts University and hold certificates in leadership, management and community building from University of Massachusetts - Boston's College of Management, Harvard University's Kennedy School of Government, and University of Miami's School of Architecture. He was a 2009-2012 Barr Foundation Fellow and a 2006 recipient of Boston Business Journal's 40 Under 40 award. His projects have received funding from the MacArthur Foundation, Ford Foundation, the Atlantic Philanthropies, the San Francisco Foundation, the Boston Foundation, and the Barr Foundation. He chaired the successful campaigns of Sam Yoon, the first Asian American to run for and win elected office in the City of Boston in 2005 and 2007; he also chaired the groundbreaking Yoon campaign for mayor in 2008. More about Jeremy can be found at: www.linkedin.com/in/jeremy-cliu/

KEYNOTE PANEL- IX Science, Spirituality, and Healing

10:30 am- 12:00 pm, Thursday, June 12
Room: A101

KEYNOTE PANEL - IX DISTINGUISHED SPEAKERS



Dr. Yei-Wei Magnus Lou
*Former President
Chinese Association of
Bio-Electro-Magnetic Science*

**The Alternative Chinese Dream: Integrated
Science, Spirituality and Healings.**

Dr. Yei-Wei Magnus Lou is the former President of Chinese Association of Bio-ElectroMagnetic Science (2010-2014) where he organized series of monthly lectures on subjects related to integrated science, spirituality and healings. Most of them (in Chinese) are now uploaded to YouTube and the association website. His organization is unique and representing a group of Chinese scientists and professionals living in Taiwan who are both curious and rational in trying to find common scientific reasonings behind "alternative or integrative subjects".

Dr. Lou graduated from Tsing-Hwa (Hsin-Chu, 1977), Carnegie-Mellon(1979) and M.I.T.(1984), all in the Departments of Materials Sci. & Engineering. He initiated a Chinese Alternative Bio-Sci. & Technology Discussion Group among Chinese students, scholars and professionals to investigate TCM and Qi-Kung phenomena in general and the "Qi-Kung Fever" on Mainland China in particular during the period of 1984-1989. His extensive aerospace/hi-tech industrial experiences include GE-Aircraft Engines, FLOW-Int'l, Taiwan Aerospace and AlliedSignal Aerospace. He currently works at Honeywell Aerospace (1994 to present).

In this ATLAS meeting, he will summarize the key study subjects and personalities of the contemporary integration themes in Taiwan that include: the explorations of "Resonance as Qi", "Origins of I-Ching", "New Cancer Treatment Perspectives", "Common Core Values of Spirituality", ...etc. These could possibly become the new Chinese, or world-wide humanity's, cultural dreams and aspirations.



Dr. Marilyn Mandala Schlitz
*Ambassador for Creative
Projects and Global Affairs,
Institute of Noetic Sciences.
Senior Scientist, Research
Institute, California
Pacific Medical Center.*



Aming Tu
Professor
Buddhist Informatics
Buddhist College
Dharma Drum

Aming Tu is professor of Buddhist Informatics at Dharma Drum Buddhist College, who is the Excellence Award Winner of Top Talent of National Science Council (2011-12) and the Ministry of Education (2013-15), Taiwan.

Since 1994 Aming has been involved in the constructing of the Buddhist Electronic database, has contributed many Buddhist digital resources since then. From 1998 to 2006 he is the Executive Manager of Chinese Buddhist Electronic Text Association (CBETA), he is the Vice Director of CBETA now.

He is currently the project director of Awareness-Compassion Training: Imaging of Neuroscience, ACTION (fMRI & Scale) and Building the Chinese Buddhist literature research environment, BCBE (Digital Humanities) of National Science Council.

**KEYNOTE PANEL - X
Spirituality, Technology, and
Social Wellbeing**
1:30 pm- 3:00 pm, Thursday, June 12
Room: A101

KEYNOTE PANEL - X DISTINGUISHED SPEAKERS



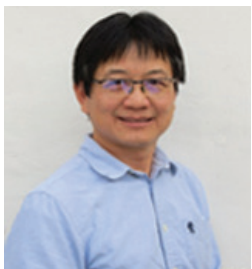
Dr. Shu Liao
Professor
Department of Social Work
Asia University, Taiwan

Dr. Shu Liao teaches at the Department of Social Work at Asia University in Taiwan. Her research interests include community service and learning as well as women empowerment. She co-founded the Service-Learning Division of Student Affairs, and Center for Advanced Research of Entrepreneurship (CARE)—a transdisciplinary research center in Asia University with Dr. Raymond Yeh and others. As the Librarian of the university, she envisions the library to be a transdisciplinary platform for the various departments at Asia University. She is a recipient of the social Justice Award in 2001, and a national outstanding teacher award in service learning in 2008 among other recognitions.



Dr. Zizhuo Shi
*Postdoc Researcher Fellow
 Research Institute for
 Humanities and Social Sciences
 National Science Council
 Taiwan*

Dr. Zizhuo Shi is a postdoctoral researcher who works at the Research Institute for Humanities and Social Sciences at National Science Council, Taiwan. She graduated from the Department of Education Policy, Organization and Leadership at University of Illinois at Urbana Champaign. Her educational background is characterized with transdisciplinarity because she has been trained in three different departments which are across three disciplines: East Asian Language and Cultures (humanities), Education Policy, Organization and Leadership (social sciences) and Community Informatics program (related to computer science). Her interest involves philosophy of education, caring theory, Buddhist epistemology, philosophy of mind, education of mindfulness, meditation, research methodology, digital humanity and community informatics. She published one book and co-translated several books. The book is *A study on the Anthology Za Ahan Jing (T101): Centered on its Linguistic Features, translation Style, Authorship and School Affiliation*. Translations consists of *Buddhism and Society: A great translation and its Burmese Vicissitudes*, *Dharma Vision* and a series of books written by Ven. Dharma-dasa. Her doctoral thesis is entitled *Reason and Care: Constructing an Inclusive Moral Theory for Civic Education* which applies both Merleau-Ponty's theory of intersubjectivity and Nāgārjuna's philosophy of dependent co-arising to bridge the gap of the incompatible ontological ground of caring theory and rational moral philosophy. Her thesis enhances the relational ground of caring theory and hence forms a more inclusive theoretical foundation for modern education to tackle the emerging issues derived from social, political and technological fields. Now she is co-working on a transdisciplinary project which aims to help underrepresented students who live in remote area. Also, she is working with her dharma sisters to establish a research institute for innovation and leadership.



Dr. Hsichuan Kent Lin
*Department of Leisure and
 Recreation Management
 Asia University, Taiwan*

Dr. Hsichuan Kent Lin teaches at the Department of Leisure and Recreation Management at Asia University in Taiwan. He majors in several different disciplines, such as mass communication, politics, and urban planning. He publishes two Chinese transdisciplinary books: *Aesthetics of Politics and Sustainable Governance of Cross-board*. Currently, his research interests focus on sustainable tourism, aesthetics of community, event management, and cultural tourism. He has conducted several creative events in school and Wu-feng communities, guiding students across the campus boundary to participate in local communities and regional development.

KEYNOTE PANEL-XI
Transreligion Dialogue
3:30 pm- 5:00 pm, Thursday, June 12
Room: A101

*Transreligion that includes all religions
 the way a forest includes its trees*

KEYNOTE PANEL-XI
DISTINGUISHED SPEAKERS



Dr. Basarab Nicolescu
*Member of the
 Romanian Academy.
 President, International
 Center for Transdisciplinary
 Research and Studies (CIRET)
 France*



Bob Block
*Founder and the First Chairman
 of the United States Sports
 Academy and
 Founder and Managing
 Partner of LiTricity*



Dr. Pamela Heckel
*Former Project Officer
 National Institute for
 Occupational Safety and Health*



Bhikshuni Heng Yin
Buddhist Nun

Bhikshuni Heng Yin grew up in Austin, Texas and received a BS in Computer Science at the University of Texas. She has been a Buddhist nun for 22 years ordained under the late Venerable Master Hsuan Hua. She holds an MA in Translation of Buddhist Texts from Dharma Realm Buddhist University and has been a translator and publication coordinator for the Buddhist Text Translation Society. She served for twelve years as Girls' Division Principal of the Instilling Goodness Elementary School and Developing Virtue Secondary School at the City of Ten Thousand Buddhas in Ukiah, CA. She also serves on the Board of Directors of Dharma Realm Buddhist Association and the Women's Sangha Coordinating Committee. She strives to apply Buddhist principles to contemporary concerns such as the character development of youth, inter-religious harmony, environmental protection, and animal welfare.

INVITED PAPER
Javier Collado Ruano

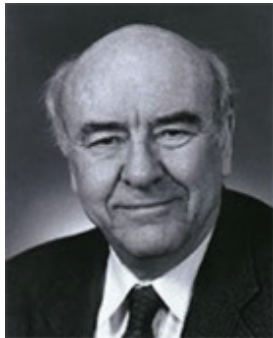
5:00 pm - 5:30 pm, Thursday June 12
Room: A101

The Cosmodernity Paradigm: A Transdisciplinary, Transnational and Transcultural Approach to Build a Transdemocratic Horizon in the Global Citizenship Education Proposed by UNESCO, by Javier Collado Ruano, Dante Augusto Galeffi, and Roberto Leon Inacio Ponczek, Federal University of Bahia, Brazil (DMMDC).

TECHNICAL PAPER PUBLICATION

Transdisciplinary JOURNAL OF ENGINEERING & SCIENCE

The Transdisciplinary Journal of Engineering & Science is dedicated to honor **Professor John Warfield** by recognizing responsibilities for a culture of peace and transdisciplinary knowledge.



**Professor Warfield
(1925-2009)**

Professor Warfield (1925-2009) received the Bachelor of Arts in 1948, Bachelor of Science in Electrical Engineering in 1948, and Master of Science in Electrical Engineering in 1949 from the University of Missouri, Columbia, Missouri. He received the Doctor of Philosophy degree from Purdue University, West Lafayette, Indiana in 1952. John Warfield is widely recognized as the father of systems science. He has been an educator, a research scientist in complex systems and organizational dynamics, and a leader in integrating an extensive body of research into an organized hierarchy of systems sciences. Dr. Warfield and his colleagues analyzed complexity and human cognition for over forty years and developed the founding relationships for the still-emerging systems science discipline that under-

pins significant portions of modern systems engineering. His rich body of work embodies analytical methods and frameworks, behavioral science and philosophies that formalize our understanding of complexity in our world. He holds IEEE Centennial Medal. In 2006 John N. Warfield was awarded the Joseph G. Wohl Award for Career Achievement and in 2007 he received INCOSE Pioneer Award and was also awarded the IEEE Third Millennium Medal.



All technical papers will be reviewed by the Program Technical Committee. All accepted papers will be published in the conference proceedings. Competitively selected papers will be first published in the Transdisciplinary Journal of Engineering & Science by ISSN number: 1949-0569, then every year will be included in a book published by TheATLAS with an ISBN number. For more information see www.theatlas.org

JOURNAL AIMS & SCOPE

Transdisciplinary Journal of Engineering & Science (TJES) is a transdisciplinary international journal which bridges the gap between science, engineering, art, culture, spirituality and society. It is a peer-reviewed annually published online journal covering research on transcultural, transreligious, transpolitic, and transnational global unstructured problems such as health, disasters, poverty, water and food crises, environmental crises, violence, terrorism, humanitarian assistance and needs, well-being, transportation, security, international development, global economy (knowledge

economy), sustainable development, energy issues, social policy and globalization, green engineering and science, art and design, complexity, research on contemporary issues, demographic changes, theology, and international ethics.

Researchers are also encouraged to submit manuscripts related to:

- Development of integrated analysis, synthesis, and design from a wide range of knowledge.
- Development of unified transdisciplinary modeling framework—developing computer based modeling systems that permit cooperation and collaboration among diverse groups that are globally dispersed in order to drive complex research efforts to an innovative solution.
- Designing and development of communication infrastructure and shared resources to facilitate computational and transdisciplinary thinking within existing organizations.
- Transdisciplinary education.

Accepted papers will be first published by ISSN number then every year will be included in a book published by TheATLAS with an ISBN number.

Please submit your work for publication consideration in the Transdisciplinary Journal of Engineering & Science (TJES) through online submission site:
http://www.theatlas.org/index.php?option=com_content&view=article&id=82&Itemid=96

FOR MORE INFORMATION CONTACT:

Dr. Atila Ertas
Texas Tech University
Mechanical Engineering Department
Lubbock, Texas 79409-1021
Phone: (806) 834-5788
email: aertas@coe.ttu.edu

ATLAS GOLD MEDAL OF HONOR AWARD RECIPIENTS AND ATLAS HONORARY MEMBERS RECOGNIZED SINCE 2000



Dr. Herbert A. Simon
Nobel Laureate
Carnegie Mellon University
Date of TheATLAS Board decision for
the Honor : January, 2001



Dr. George Kozmetsky
IC2 Institute, University of
Texas at Austin
Date of TheATLAS Board decision for
the Honor : January, 2001



Dr. Steadman Upham
President, Claremont Graduate
University, CA
Date of TheATLAS Board decision for
the Honor : January, 2001



Honorable K. T. Li
Changing Taiwan from an economy
reliant on light industry to
high technology
Date of TheATLAS Board decision for
the Honor : January, 2001



Dr. Michael Anthony Arbib
Fletcher Jones Professor of
Computer Science
University of Southern California
Date of TheATLAS Board decision for
the Honor : May, 2002



Dr. C.V. Ramamoorthy
Emeritus Professor
University of California, Berkeley
Date of TheATLAS Board decision for
the Honor : May, 2002



Dr. Raymond T. Yeh
IC2 Institute Senior Research Fellow,
University of Texas at Austin
Date of TheATLAS Board decision for
the Honor : November, 2003



Dr. Lu Yyong Xiang
Prof. Dr.-Ing. Mult.hon.Dr. Eng.
President, Chinese Academy of Sciences
Vice-Chairman of the Standing
Committee, NPC
Date of TheATLAS Board decision for
the Honor: June 2005



Professor Nam P. Suh
The Ralph E. & Eloise F. Cross Professor
Director, The Park Center for
Complex Systems
MIT, Cambridge, MA
Date of TheATLAS Board decision for
the Honor: June 2006



Dr. Herbert Weber
Director of the Fraunhofer Institute for Soft-
ware and Systems Engineering
Technical University of Berlin, Germany
Date of TheATLAS Board decision for
the Honor: June 2006



Dr. Günter Valet
Max-Planck-Institut für Biochemie,
Am Klopferspitz 18, D-82152
Martinsried, Germany
Date of TheATLAS Board decision for
the Honor: June 2006



Bruce R. Korf, MD., Ph.D.
Wayne H. and Sara Crews Finley Professor
Chairman, Department of Genetics University
of Alabama at Birmingham, AL
Date of TheATLAS Board decision for
the Honor : June, 2006



Professor Carl Adam Petri
Honorary Professor, Department of
Informatics, Hamburg University
Date of TheATLAS Board decision for
the Honor : April, 2007



Professor Dr. Oktay Sinanoglu
Nominated twice for Nobel Prize
Date of TheATLAS Board decision for
the Honor : April, 2007



Dr. Chun-Yen Chang
1999 Science & Engineering Award Laureate
Founding Director of National Nano-Device
Labs in Taiwan
Date of TheATLAS Board decision for the
Honor : April, 2007



Dr. Yuan T. Lee
Nobel Laureate
Date of TheATLAS Board decision for
the Honor : October, 2007



Dr. Edgar Mitchell
Sixth man walked on the Moon
Founder of the Institute of Noetic
Sciences
Date of TheATLAS Board decision for
the Honor : April, 2007



Dr. Ali Nayfeh
Distinguished Professor, Virginia Tech
Date of TheATLAS Board decision for the
Honor : April, 2007



Dr. Muhammad Yunus
Nobel Laureate
Date of TheATLAS Board decision for
the Honor : October, 2008



Lily Yeh
Founder, Artists without Borders
Date of TheATLAS Board decision for
the Honor : October, 2008



Red McCombs
McCombs Enterprises
Chairman & COO
Date of TheATLAS Board decision for
the Honor : March, 2010

ATLAS GOLD MEDAL OF HONOR AWARD RECIPIENTS AND ATLAS HONORARY MEMBERS RECOGNIZED SINCE 2000 (continued)



Prof. O. J. L. Tzeng
*Former Minister of Education in
Taiwan and Former Vice President
of Academia Sinica, the National
Research Academy of Taiwan*
Date of TheATLAS Board decision for
the Honor : February, 2012



Dr. Chang-Hai Tsai
*Chairman of the Board
China Medical University
Taichung, Taiwan*
Date of TheATLAS Board decision for
the Honor : February, 2012



Dr. Atila Ertas
*Professor and Director of
Academy of Transdisciplinary
Studies, Mechanical Engineerin
Department, Texas Tech University*
Date of TheATLAS Board decision for
the Honor : August, 2012

TheATLAS / VILLAGE FELLOWS



Fuad Gattaz Sobrinho
*President of Ambiencia
Information Systems, Ltd,
Campinas, Brazil*
Honor: January 2010



Dr. I. Esat
*Professor
Brunel University, UK*
Honor: January 2010



Dr. Jeffrey J. P. Tsai
*President
Asia University
Taichung, Taiwan*
Honor: January 2010



Dr. Hiroshi Yamaguchi
*Research & Development
Initiative Chuo University,
Tokyo, Japan*
Honor: January 2010



Dr. Allam Appa Rao
*Jawaharlal Nehru
Technological
University, Kakinada, India*
Honor: January 2010



Dr. Yong Zeng
*Concordia University,
Montreal, Quebec
Canada*
Honor: January 2010



Dr. Gunay Anlas
*Bogazici University
Istanbul, Turkey*
Honor: January 2010



Dr. Atila Ertas
*Texas Tech University
Lubbock, Texas*
Honor : January, 2010



Dr. S. S. Iyengar
*Florida International
University
Florida, USA*
Honor : January, 2010



Dr. Shu Liao
*Professor
Department of Social
Work Asia University
Taiwan*
Honor : January, 2010



C.V. Ramamoorthy
*Professor
University of California
Berkeley, CA.*
Honor : January, 2010



Dr. Raymond T. Yeh
*TheATLAS
Honorary Board member*
Honor : January, 2010



Bob Block
*Founder and Managing
Partner of LiTricity*
Honor: January, 2012



Dr. Sarah Gehlert
*Professor
Racial and Ethnic
Diversity
Washington University*
Honor : January, 2012



Dr. Eunsook Hyun
*Professor
Charter College of Education
California State University,
Los Angeles, California*
Honor : January, 2012



Dr. Sue L. McGregor
*Mount Saint Vincent
University, Canada*
Honor : January, 2012



Dr. Basarab Nicolescu
*President, International
Center for Transdisciplinary
Research and
Studies (CIRET), France*
Honor : January, 2012



Dr. Daniel Stokols
*School of Social Ecology
College of Health Sciences
University of California,
Irvine, Irvine, CA*
Honor : January, 2012



Mr. Xuedong Zhang
*Vice Secretary General
China Public Administration
Society (CAPS)*
Honor : January, 2012



Dr. Jack Thomas Trevors
*Professor, Department of
Environmental Biology
University of Guelph,
Guelph, Ontario, Canada*
Honor : January, 2012

2014 ATLAS AWARDS

ATLAS awards will be presented during the conference dinner on Monday, June 9, 2014

2014 ACADEMY GOLD MEDAL OF HONOR AWARD RECIPIENT

In recognition of distinguished contributions to the advancement of transdisciplinary foundational ideas and activities which have been instrumental in developing and implementing the concepts and philosophy of transdisciplinary education and research.



Barry Lam
Chairman & CEO
Quanta Computer Inc.

Barry Lam has been described as a maverick among Taiwanese businessmen. Barry was born and raised in Hong Kong, but moved to Taiwan to attend National Taiwan University, where he received his bachelor's and master's degrees. In 1973 he and some former classmates launched Kimpo, a maker of handheld calculators. Barry became president and built the company into the world's largest contract calculator maker. But by the late 1980s, Barry Lam was looking for new challenges. As technology for making flat-panel displays matured, he figured the next big thing would be notebook PCs. Unfortunately, as a minority shareholder of Kimpo, Barry couldn't persuade the company's directors to take a risk on these new computers so he quit and started Quanta in 1988. Within two years, the young company had attracted Siemens and Philips Electronics as customers, among others.

Quanta has continued to lead the industry in portable, ubiquitous electronic systems. While 2001 was a year to forget for almost everybody in the PC world, Quanta continued to grow. Back in 2000 Quanta produced a customized laptop computer in 72 hours; a year later—48 hours; today—less than 24 hours. Quanta had moved all its production to China. With annual turnover over US\$33BN today, Quanta is one of the world's leading providers of technology products and solutions to Fortune 500 companies such as Apple, HP, Dell, IBM, Sony and others. Quanta holds the distinction as the world's largest manufacturer of laptop PCs, making over 1 in every 3 laptop PCs globally today. Quanta also provides a full array of mobile phones, mobile internet devices and servers and storage products. As Barry will tell you, Quanta's success is made possible by the company's ability to provide customers with high value added services from innovative product development, flexible manufacturing, real-time supply chain management to after sales service and support. Barry is convinced that product diversification and innovation will keep Quanta's flexible manufacturing busy for years to come.

With the dedication to technological innovation and education, Barry launched the \$200M R&D center project, Quanta R&D Complex (QRDC), in Taiwan. With floor space of 2.2M square feet and a capacity to house up to 7,000 engineers, QRDC is being touted by many in Taiwan as the "Dreamland of R&D Engineers." QRDC inaugurated in late 2005 which is the headquarter of Quanta Computer Inc.

In 2005, Quanta and MIT announced a five-year, \$20M joint research collaboration project ("TParty") aimed at developing the next generation of platforms for computing and communication beyond personal

computers. Furthermore, Quanta are hoping to build closer ties with more worldwide research institutes, tackling some advanced research projects that complement the Quanta-MIT TParty project and help expand the vision to provide reliable, affordable access to the benefits of information and communications technologies to all the world's citizens.

In both 1999 and 2001, Barry was chosen by Business Week as one of the fifty "Stars of Asia". In 2002, he was highlighted on Business Week's list of the top 25 managers of the year for his achievements in taking Quanta to the number 1 notebook maker in the world. In 2005, Barry received degree of doctor for technology honoris causa from Hong Kong Polytechnic University. Barry received Honorary Doctoral Degrees from National University (NTU) in 2007, and City University of Hong Kong (CityU) in 2011. In 2012, National Tsing-Hua University and National Chiao Tung University respectively had awarded an honorary doctorate to Barry to honor his outstanding achievement in the industry; his exemplary humanitarian spirit, and his efforts to promote art and literature.

Barry is also the Director of Cloud Gate Theatre Group and the Chairman of Quanta Education Foundation. The foundation has supported numerous charitable activities and promoted culture and arts to enrich people's lives. From year 2008, Barry is the member and Convener of National Palace Museum Advisory Committee. He is the Chairman of Epoch Foundation since 2008 and joins current membership of MIT EECS visiting committee.



Dr. Basarab Nicolescu
Member of the Romanian Academy
President, International
Center for Transdisciplinary
Research and Studies
(CIRET), France

Theoretical physicist at the Centre National de la Recherche Scientifique (CNRS), Paris, France. Professor at the Babes-Bolyai University, Cluj-Napoca, Romania. Member of the Romanian Academy. Professor Extraordinary at the School of Public Leadership, Stellenbosch University, South Africa. Founding member of ISSR. President-Founder of the International Center for Transdisciplinary Research and Studies (CIRET), a non-profit organization (165 members from 26 countries), which has a web site at : <http://ciret-transdisciplinarity.org/index.php>. Founder and Director of the Transdisciplinarity Series, Rocher Editions, Monaco, of the Romanians in Paris Series, Oxus Editions, Paris and of the Science and Religion Series, Curtea Veche, Bucharest (in collaboration with Magda Stavinschi). A specialist in the theory of elementary particles, Basarab Nicolescu is the author of 130 articles in leading international scientific journals, has made numerous contributions to science anthologies and participated in several dozen French radio and foreign multimedia documentaries on science. Basarab Nicolescu is a major advocate of the transdisciplinary reconciliation between Science and the Humanities. He published many articles on the role of science in the contemporary culture in journals in USA, France, Romania, Italy, United Kingdom, Brazil, Argentina and Japan. His books include : From Modernity to Cosmodernity - Science, Culture, and Spirituality, State University of New York (SUNY) Press, New York, 2014, Manifesto of Transdisciplinarity, State University of New York (SUNY) Press, New York, 2002; Nous, la particule et le monde, Rocher, Monaco, 2002 (2nd edition) ; Science, Meaning and Evolution - The Cosmology of Jacob Boehme, Parabola Books, New York, 1991. He "recently" edited Transdisciplinarity -Theory and Practice, Hampton Press, Cresskill, New Jersey, 2008. A complete biobibliography of Dr. Basarab Nicolescu can be found on the page: <http://basarab-nicolescu.fr/>.

2014 KWOH-TING LI MEMORIAL MEDAL AWARD RECIPIENT

The Kwoh-Ting Li Memorial Medal Award was established in 2012 as a special honor to the distinguished lecturer of the Kwoh-Ting Li Memorial lecture.



Jin-Fu Chang, Ph. D.
*President, Yuan Ze University
Board Chairman, Institute for
Information Industry*

2014 GEORGE AND RONYA KOZMETSKY MEMORIAL MEDAL AWARD RECIPIENT

The George and Ronya Kozmetsky Memorial Medal Award was established in 2012 as a special honor to the distinguished lecturer of the G&RK Memorial lecture.



Dr. Juan M. Sanchez
*Vice President for Research
The University of
Texas at Austin, TX*

RAMAMOORTHY & YEH TRANSDISCIPLINARY DISTINGUISHED ACHIEVEMENT AWARD RECIPIENT

This award is given in recognition of distinguished and meritorious achievement in transdisciplinary research as evidenced by use of transdisciplinary creative and innovative methods in solving complex problems and outstanding leadership in transdisciplinary education and its activities.



Dr. Wen-Tsuen Chen
*Distinguished Research Fellow,
Academia Sinica, Taiwan
Program Director, National
Program for Intelligent Electronics*



Dr. Hiroshi Yamaguchi
*Research & Development
Initiative, Chuo University,
Tokyo, Japan*

BASARAB NICOLESCU TRANSDISCIPLINARY SCIENCE & ENGINEERING AWARD RECIPIENTS

In November 2013, TheATLAS established the Basarab Nicolescu Transdisciplinary Science & Engineering Award to be awarded annually during the TheATLAS annual meeting. This award is given in recognition of outstanding achievement in transdisciplinary research or education as evidenced by use of transdisciplinary skills in solving unstructured societal problems and outstanding leadership in transdisciplinary education and its activities.



Dr. Sarah Gehlert
*E. Desmond Lee Professor of
Racial and Ethnic Diversity
The George Warren Brown
School of Social Work &
Department of Surgery, School of
Medicine, Washington University*



Dr. Eunsook Hyun
*Dean & Professor
Charter College of Education
California State University,
Los Angeles, California*

2014 NEW ATLAS / VILLAGE FELLOWS

Fellow awards will be presented during the conference dinner on Monday, June 9, 2014



Dr. Yunus A. Çengel
Dean
Faculty of Engineering
Adnan Menderes University
(ADU) Aydin, Turkey



Dr. Wen-Tsuen Chen
Distinguished Research
Fellow, Academia Sinica,
Taiwan
Program Director, National
Program for Intelligent
Electronics



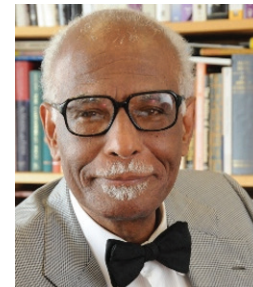
Dr. Hans Dieleman
Professor & Coordinator
Doctoral Program in
Transdisciplinary Studies
University Veracruzana
Veracruz, México



Dr. Sukanta Ganguly
Chief Technology Officer &
Head of Products
QuickPay Corp
San Jose, CA



Pamela Heckel, Ph.D, P.E.
Former Project Officer
National Institute for
Occupational Safety and
Health



Dr. Winston E. Langley
Provost and
Vice Chancellor for
Academic Affairs
University of Massachusetts
Boston



Dr. Cristina Núñez-Madrado
Director of the Center for
EcoLiteracy and Dialogue of
Knowledges & Director of the
Doctoral Program in
Transdisciplinarity Studies
Universidad Veracruzana,
Xalapa, Veracruz, México



Dr. Juan M. Sanchez
Vice President for Research
The University of
Texas at Austin, TX



**Dr. Gerardo Del Cerro
Santamaria**
Director of Assessment and
Innovation, Professor of Social
Science, The Cooper Union for
the Advancement of Science and
Art
New York, USA



Dr. Marilyn Mandala Schlitz
Ambassador for Creative
Projects and Global Affairs,
Institute of Noetic Sciences.
Senior Scientist, Research
Institute, California
Pacific Medical Center.



Dr. Derrick Tate
Founding Head of
Industrial Design Department
Xi'an Jiaotong
Liverpool University
Suzhou, China



Dr. Stephen J. H. Yang
Director
Department of Information and
Technology Education,
Ministry of Education
Taiwan

TOURS - Friday June 13, 2014

TheATLAS 2014 Conference Tours

CHUNG TAI CHAN MONASTERY



In 1987, Grand Master Wei Chueh built Lin Quan ("Spiritual Spring") Chan Monastery in response to his disciples' needs for a place of spiritual cultivation and refuge.

With an inimitable aura of calmness, a penetrating mind, and the ability to clearly elucidate the profound wisdom of the Buddha, the Grand Master was instrumental in revitalizing Chan (Chinese Zen) Buddhism in Taiwan. Soon Lin Quan Chan Monastery was too small to accommodate the ever-increasing number of followers eager for the Grand Master's teaching.

Following the Grand Master's compassionate vow to provide a complete environment for all who wish to learn the Buddhist teachings, the design of Chung Tai Chan Monastery began in 1992.

After three years of planning and seven years of construction, this landmark building opened its doors on September 1, 2001, initiating a new era of Buddhism dissemination for Chung Tai.

SUN MOON LAKE



Sun Moon Lake is situated to the north of Yu Shan (Jade Mountain) and to the south of Nenggao Mountain, Nantou County in Taiwan Province. It is the biggest natural lake in Taiwan and is formed by the accumulated water in the broken basin between Yu Mountain and Ali Mountain streams. The surface of the lake is 760 meters above sea level, its perimeter is 35 kilometers, the depth of the water is 30 meters on average and the lake area is over 900 hectares. There is a small island inside Jihueh Pool which looks like a pearl on the surface of the water, hence the name "Pearl Islet". After the victory of Japanese war, it was renamed "Gueng Hua (brilliance) Islet" in celebration of recovering Taiwan. To the north-east of the islet, the water is in a shape as round as the sun, so it is called Sun Lake while the water in

the south-west looks like the moon, so it is called Moon Lake. Hence the combined name Sun Moon Lake.

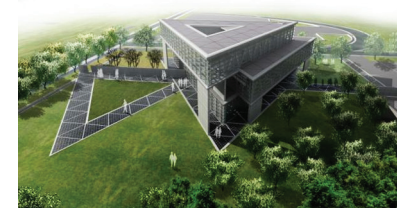
The beauty of Sun Moon Lake is rested upon the mountains circling the lake. Peaks rise one upon another and range upon range of hills, green and luxuriant, the broad water surface, mirror-like calm water, azure lake water, islet in the lake, hill in the water, the light of waves and shadow of mists and different morning and evening scenery all year round, poetic and picturesque.

MUSEUM OF MODERN ART

Asia University Museum of Modern Art, designed by Pritzker award winner Tadao Ando, features the exhibition of Auguste Rodin and Henry Moore now. Asia University will provide tickets for ATLAS Conference participants who would like to visit.

At a speech given during the opening ceremony which was attended by Taiwanese President Ma Ying-jeou and some 150 guests from Japan, Ando recalled his profound and pleasant surprise at encountering sculptures and other works by Rodin scattered liberally throughout the grounds and gardens of the university campus during an initial site visit. The triangular design of his building is apparently meant to evoke the necessity for the three sides and corners to help and support

each other, symbolizing hopes that Asia University will be able to nurture graduates with ample "imagination and courage."



HOTEL INFORMATION



TheATLAS 2014 Conference, June 8-13, 2014 The Splendor Taichung (Room Reservation)

Reservation Direct Line +886 4 23246000;
Fax +886 4 23246100
Web Site :
<http://www.splendor-taichung.com.tw>
E-mail Address:
tchsplendor@gmail.com / xreservation.tc@thesplendor.com

ATLAS 2014 Special Room Rate

Deluxe Single(1 King Bed)
NT\$ 3,300net (With 1 Breakfast)

Deluxe Double(2 Single Beds)
NT\$ 3,600net (With 2 Breakfasts)

Executive Studios (1 Queen Bed)
NT\$ 2,000 (With 1 Breakfast)

Executive Twin (2 Single Beds)
NT\$ 2,400 (With 2 Breakfasts)

5% business tax and 10% service charge
included within the above price.

CONFERENCE REGISTRATION FEES AND POLICIES

Cancellations must be submitted in writing and received by TheATLAS before May 7, 2014. If the cancellation is made before May 7th, there will be a \$200 processing fee that will be charged. After May 7, no refunds can be made.

Conference registration fee (\$495) includes:

- Welcome Reception on Sunday
- Conference Dinner
- Lunch every day
- Reception honoring Dr. Basarab Nicolescu
- Coffee Breaks every day
- If you have submitted a paper, conference proceedings will be available after the conference is over.
- Conference tour

FOR MORE INFORMATION CONTACT:

Dr. Atila Ertas
Texas Tech University
Mechanical Engineering Department
Lubbock, Texas 79409-1021
Phone: (806) 834-5788
email: aertas@coe.ttu.edu

The world of nature is increasingly dominated by our behavior. Humanity must take no more from nature than nature can provide. Future generations should not be affected by our present actions. Global and shared resources such as atmosphere, oceans and shared ecosystems must be protected by all of us. All nations stand to gain from global sustainability and are threatened if we fail to attain it. Developing and underdeveloped countries must be helped to develop sustainably and protect not only their environments but also ours.

DISAPPEARING RESOURCES