IEEE R10 EXCOM
02 March 2019, Melbourne

Chris Gwo Giun Lee
Industry Relations Committee Chair 2019
Paradigm Shift in Technology

Industry 1.0: Energy

Industry 2.0: Electricity

Industry 3.0: Information

Industry 4.0: AI
Vision & Mission of IRC

**Vision**

- Big corporate style on-the-job-training is reducing
- Ecosystem with more startups & self-employment requires self-learning & metacognitive skills especially for students.
- IEEE should witness new paradigm shifts in workplace modality:
  - mobility of Young Professionals (YP)
  - leadership and participation by Women in Engineering (WIE)
- Special Industry Track introduced by Prof. Takako Hashimoto

**Mission**

- IRC should organize Industry Forums
  - industry speakers address pain spots & academia *innovate* together for solutions
- Provide students with real world thesis topics and/or possible *internship* opportunities
- Academia work on real world problems with research outcome required by the Industry
- Industry including YP and WIE, have access to advanced technologies and talents throughout this IRC networking platform
- Fosters *entrepreneurship*
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<thead>
<tr>
<th>Name</th>
<th>Country</th>
<th>Position/Role</th>
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<tbody>
<tr>
<td>Dr. Stefan Mozar</td>
<td>Australia</td>
<td>Past Chair, IEEE R10 Industry Relations</td>
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<td>Sheila Chuang</td>
<td>Taiwan</td>
<td>Senior Executive VP (tbc), Taipei Fubon Commercial Bank</td>
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<td>Dr. Suresh Nair</td>
<td>India</td>
<td>Global Chief Technology Officer, NeST Group</td>
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<td>Dr. Amit Kumar</td>
<td>India</td>
<td>CEO &amp; Chief Scientific Officer, BioAxis DNA Research (P) Ltd</td>
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<td>Andy Chen</td>
<td>Canada</td>
<td>President, CEO, Catronic Enterprise</td>
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<td>Soumaya Jaber</td>
<td>Australia</td>
<td>WIE, New South Wales Section</td>
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<tr>
<td>Dr. Toshihiko Sugie</td>
<td>Japan</td>
<td>Senior Technology Strategist, NTT Electronics Corporation</td>
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<tr>
<td>Dr. Chii-Wann Lin</td>
<td>Taiwan</td>
<td>VP &amp; General Director, BioM Tech. &amp; Dev. Res. Lab. ITRI</td>
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### Industry Relations Committee Members

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<tr>
<th>Dr. Justin Chuang, Hong Kong</th>
<th>Satriyo Dharmanto, Indonesia</th>
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<tr>
<td>Vice President</td>
<td>Founder, CEO</td>
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<td>Next Generation Network, ASTRI</td>
<td>PT Multikom Global Mediatama</td>
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<th>Nivas Navichandran, India</th>
<th>Dr. Nirmil Nair, New Zealand</th>
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<tr>
<td>Past Chair</td>
<td>Chair</td>
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<td>IEEE R10 Young Professional</td>
<td>IEEE R10 Professional Activities</td>
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<th>Dr. Narendra Kumar, Malaysia</th>
<th>Muhammad Farooqui, Pakistan</th>
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<tr>
<td>Acting Head, Univ. of Malaya,</td>
<td>Industry Relations Chair</td>
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<td>Center Research Industry 4.0</td>
<td>IEEE Islamabad Section</td>
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<th>Azah S. M. Marzuki, Malaysia</th>
<th>Chris Gwo Giun Lee, Taiwan</th>
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<tr>
<td>Chair, IR &amp; PA</td>
<td>Professor</td>
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<td>IEEE Malaysia Section</td>
<td>Natl. Cheng Kung Univ.</td>
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Decision in an Instant: From EDGE to Immediacy

Some pain spots of the industry??...

- From intelligent cloud to intelligent EDGE for (near) real-time response in:
  - Autonomous car
  - Biotech: Precision Medicine, Extension of Telemedicine
  - Fintech: Precision Economy/Finance Management
  - Agriculture: Precision Agriculture
  - Energy: Smart Green Power & Sustainable Energy with Climate Change
  - 5G: Next generation Cloud & EDGE Networking
IRC, PAC, SAC, YP, WIE & MD Collaborations

Professional Activities Projects
1. R10 PA Challenge
2. Encouraging R10
3. SMARTech/HARDTECH for career enhancement
4. PA event in R10 conferences

Industry Relations Projects
1. Industry Forum Organization
   • Internship
   • Entrepreneurship

Student Activities Projects
1. Membership Development
2. Undergraduate Project Video Contest
3. Webinar Series
4. Regular Activities

YP

Entrepreneurship

IRC P1 with PAC P3/P4 on Entrepreneurship

WIE

IRC P1 with WIE P3 on Entrepreneurship
IRC P1 with SAC P2 on Internship

Professional Development

YP

Entrepreneurship
Industry Relations Committee 2019 Plan

Committee Structure
1. Advisors: Stefan Mozar, (Australia), Andy Chen (Canada)
2. Chair: Chris Gwo Giun Lee
3. Members: Sheila Chuang (Fubon, Taiwan, TBC), Soumaya Jaber (U. of Adelaide, Australia), Toshihika Sugie (NTT, Japan) Suresh Nair (NeST Group, India), Amit Kumar (BioAxis, India), Chii-Wann Lin (ITRI, Taiwan), Justin Chuang (ASTRI, HK/China), Satriyo Dharmanto (CEO, Multikom, Indonesia), Nivash Navichandran (Past-Chair YP, India), Nirmil Nair, (Chair, PAC, New Zealand), Narendra Kumar (U. of Malaya, Malaysia) Muhammad A Farooqui (IR Chair, Pakistan), Azah SM Marzuki (Chair, IR & PA, Malaysia)

Objectives
1. Fostering industry-academia networking platform for bidirectional interactions
2. Industry addresses pain spots & academia provides solutions
3. Students well prepared for industry: real world thesis topics and/or possible internship
4. Industry (including YP & WIE) accesses advanced technologies and talents from academia
5. Recruiting more industry members

Projects / Tasks
1. Industry Forum Organization during 2019 at:
   i. AICAS
   ii. ISCAS
   iii. TENSYMP
   iv. ICCE Asia
   v. TEMS India
   vi. TENCON
   vii. TEMS ISIE
   viii. HTC
   ix. VCIP

Budget (in US$)
1. Project 1: $8,050 (TENCON) = $1,800 (conf. support) + $ 6,250 (student/speaker support)
   $36,800 (8 conf.) = $14,400 (conf. support) + $ 22,400 (student/speaker support)

Total Proposed Budget : $ 44,850

Project / Task Measurable
Project 1:
1. Responses from industry & academia
2. No. of invited industry speakers w/ high influence/potential
3. No. of Student, YP, & WIE members attended

Timeline & Metrics
1. Project 1:
   Timeline: AICAS (Mar), ISCAS (May), TENSYMP (Jun), ICCE Asia (June), TEMS India (Sep), TENCON (Oct), TEMS ISIE (Oct), HTC (Nov), VCIP (Dec)
   Metrics: Task measurables above
Project 1: Conference List & Info.

**AICAS (Hsinchu, Taiwan, March 18-20)**
Topic(s): Influences of EDGE Device’s Instant Decision
Industry invited: ITRI, Fubon Bank, Catronic.
Remarks: Chris, Andy

**ISCAS (Sapporo, Japan, May 26-29)**
Topic(s): Fintech, Sustainable Energy
Industry invited: TBD
Remarks: Sugie

**TENSYMP (Kolkata, India, June 7-9)**
Topic(s): TBD
Industry invited: TBD
Remarks: Amit

**ICCE Asia (Bangkok, Thailand, June 12-14)**
Topic(s): TBD
Industry invited: TBD
Remarks: Stefan

**TEMS India (Bangalore, India, Sept)**
Topic(s): With Entrepreneur
Industry invited: TBD
Remarks: Co-organize with IEEE TEMS, Andy

**TENCON (Kerala, India, Oct. 17-20)**
Topic(s): AI-in-Biotech, Manufacturing, Agriculture/Food, Power, 5G
Industry invited: TBD
Remarks: Special Industry Track, Suresh, Amit

**TEMS ISIE (Hangzhou, China, Oct. 24-26)**
Topic(s): With Entrepreneur
Industry invited: TBD
Remarks: Co-organize with IEEE TEMS, Andy

**HTC (Depok, Indonesia, Nov. 12-14)**
Topic(s): TBD
Industry invited: TBD
Remarks: Satriyo

**VCIP (Sydney, Australia, Dec 1-4)**
Topic(s): AI for Extension of Telemedicine (TBD)
Industry invited: Dr. Dorothy Keefe TBD
Remarks: Stefan, Soumaya
New Initiative : Special Industry Track

*Introduced by Prof. Takako Hashimoto, Dr. Suresh Nair, and Prof. S. M. Sameer*

- Organized by IRC/PAC together with SYW & industry in TENCON at Kerala, India
- Booths will be sponsored by industry, after industry forum:
  - Further matchup between industry, SYW & academia for:
    - Thesis research
    - Internship
  - Matchup industry leaders, investors, and VCs with SYW and startup teams
Let’s change the world together!

讓我們一起改變世界！