## Singapore-China Joint Symposium on Al & Sustainability

Day 1: Symposium and Panel Discussion by Fellows and Members from both Academies

Venue: Nanyang Technological University, Singapore, Lecture Theatre 1A (Map)

| 8:00  | 9:00  | Registration & Welcome Reception  |
|-------|-------|---|
|       |       | Opening Ceremony  |
| 9:00  | 9:05  | Welcome Remarks   |
|       |       | <b>LIU</b> Bin  Deputy President (Research & Technology), National University of Singapore, Fellow of the Academy of Engineering, Singapore   |
| 9:05  | 9:10  | Welcome Remarks   |
|       |       | CHEN Jianfeng Secretary-General of the Chinese Academy of Engineering, China  |
| 9:10  | 9:15  | Opening Remarks by Guest-of-Honour  |
|       |       | His Excellency <b>CAO</b> Zhongming Ambassador Extraordinary & Plenipotentiary of the People's Republic of China to the Republic of Singapore |
| 9:15  | 9:30  | Token & Gift Presentations  |
|       |       | Group Photo Session 1   |
|       |       |   |
|       |       | Session Chair: WEN Yonggang (NTU)   |
| 9:30  | 9:50  | Pushing AI from Research to Application and Impact SUN Sumei  |
|       |       | Agency for Science, Technology and Research (A*STAR), Singapore   |
| 9:50  | 10:10 | Security in Developing Next-Generation Artificial Intelligence—Preserving Computing Sovereignty and Ensuring Trusted Data Sharing             |
|       |       | <b>GAO</b> Wen Peking University, China   |
|       |       |   |
|       |       | Session Chair: CHU Jian (NTU)   |
| 10:10 | 10:30 | Al-Assisted Infrared Photodetection, Thermal Emission and Spectrum Engineering for Sustainability  QIU Cheng-Wei                              |
|       |       | National University of Singapore, Singapore   |
| 10:30 | 10:50 | Development and Practice of Sustainable Urban Water Systems   |
|       |       | <b>MA</b> Jun<br>Harbin Institute of Technology, China  |
|       |       |   |
|       |       | Session Chair: MIAO Chunyan (NTU)   |
| 10:50 | 11:10 | Physically Grounded Al for Scientific Discovery: From Prediction to Generative Design ONG Yew-Soon  |
|       |       | Nanyang Technological University, Singapore   |
| 11:10 | 11:30 | From Theory to Practice in 6G Al-Native Network   |
|       |       | Tony <b>QUEK</b> Quee Seng<br>Singapore University of Technology and Design, Singapore  |
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| 11:30 | 12:10 | Panel Discussion  moderated by GUO Yongxin  |
|       |       | City University of Hong Kong, China   |
| 12:10 | 14:00 | Lunch   |
|       |       |   |

|             | Session 2   |
|-------------|---|
|             | Session Chair: WANG Rong (NTU)  |
| 14:00 14:20 | Large-Scale and Low-Cost Carbon Capture and Utilization                                       |
|             | CHEN Jianfeng Beijing University of Chemical Technology, China                                |
| 14:20 14:40 | Achieving Sustainability by Additive Manufacturing  |
|             | CHUA Chee Kai Singapore University of Technology and Design, Singapore                        |
|             | Session Chair: LI Erping (ZJU)  |
| 14:40 15:00 |   |
| 14.40 15.00 | Powering the Al Revolution: The Role of University Pilot Line in the Al Era  WU Hanming       |
|             | Zhejiang University, China  |
| 15:00 15:20 | On Autonomy, Robotics and Control   |
|             | <b>GE</b> Shuzhi Sam  |
|             | National University of Singapore, Singapore   |
|             | Session Chair: CHEN Xiaodong (NTU)  |
| 15:20 15:40 | Al Empowering Urban Vitality: Exploring the Innovative Paradigm of Human-Al Integration (HAI) |
|             | WU Zhiqiang   |
|             | Tongji University, China  |
| 15:40 16:00 | Green Fuels for Maritime  |
|             | XU Zhichuan Jason   |
|             | Nanyang Technological University, Singapore   |
| 16:00 16:40 | Panel Discussion  |
|             | moderated by <b>ER</b> Meng Hwa  Nanyang Technological University, Singapore                  |
| 16:40 16:45 | Closing Remarks   |
|             |   |
| 16:45 17:15 | Networking Session over Tea   |
| 17:15 18:30 | Transfer to Dinner Venue (by Invitation only)   |
| 18:30       | Private Dinner (by Invitation only)   |