

C5 Activity Report for the IUPAP C&CC Meeting - Rio de Janeiro, October 2012

(submitted by K. Kono, Chair C5, September 2012)

Officers/Members 2011-2014

Chair:	Kimitoshi Kono	Japan
Vice-Chair:	Karen Hallberg	Argentina
Secretary:	John Saunders	UK
Members:	John Beamish	Canada
	Nan Lin Wang	China
	Jukka Pekola	Finland
	Jean-Pascal Brison	France
	Christian Pfeleiderer	Germany
	Srinivasan Ramakrishnan	India
	Hu-Jong Lee	Republic of Korea
	Hans Hilgenkamp	The Netherlands
	Alexander Smirnov	Russia
	Alexander Feher	Slovak Republic
	Robert Hallock	USA
Associate Members: (proposal)		
	Jacek Kossut	Poland (from C8)
	YoshiChika Otani	Japan (from C9)
	Juhn-Jong Lin	Taiwan

Main Achievements

1. Commission Meeting

C5 holds its major triennial formal meeting in advance of the General Assembly on the occasion of the meeting of International Conference on Low Temperature Physics (LT), our major Type A conference held every three years. The previous meeting was in August of 2011 in Beijing at the time of LT26. We have conducted business effectively by e-mail in the interim.

2. Sponsored Conferences (2011)

Type A

- **26th International Conference on Low Temperature Physics (LT26)**

August 10-17, 2011, Beijing, China;
1,252 (1,072 registered (103 women)) participants from 45 countries;
12 plenary talks, 24 half-plenary talks and 225 invited talks (7 by women), and more than 1,200 posters;
Chairman: Zhongxian Zhao, Co-Chairman: Li Lu

Type B

- **Ultra-Low Temperature conference (ULT 2011)**

August 19-22, 2011, Daejeon, Republic of Korea;
204 registered participants (6 women) from 20 countries;
7 keynote talks and 55 invited talks (1 by women), and 99 posters;
Chairman: Hu-Jong Lee, Co-Chairman: Eunseong Kim

Type C

- **8th International Conference on Stripes and High Tc Superconductivity (STRIPES 11)**

July 10-16, 2011, Rome, Italy.
Chairman: A. Bianconi

3. Sponsored Conference (2012)

Type B

- **International Conference on Quantum Fluids and Solids 2012 (QFS2012)**

August 15-21, 2012, Lancaster, UK;
267 registered participants (26 women) from 25 countries;
9 keynote talks and 55 invited talks (3 by women), and approximately 210 posters;
Co-chairs: S.N. Fisher and G.R. Pickett

4. Sponsored Conferences (anticipated for 2013 and beyond)

Type A

- **27th International Conference on Low Temperature Physics (LT27), early approval**
August 6-13, 2014, Buenos Aires, Argentina;
about 1,200 participants
Chairman: Susana Hernández

Type B

- **International Conference on Quantum Fluids and Solids 2013 (QFS2013), proposition**
August 1-6, 2013, Matsue, Japan;
about 250 participants
Chairman: Yuichi Okuda, Co-Chairman: Kimitoshi Kono

5. IUPAP Young Scientist Prize in Low Temperature Physics

Following a successful solicitation and subsequent consideration of nominations, the second IUPAP Young Scientist Prize award ceremony in low temperature physics was held at the LT26 conference in August 2011. All prizewinners gave an invited talk. The recipients selected by the C5 commission in early 2011 (and presented with their award medal, certificate and cash award) were:

- **Eunseong Kim** [KIAS, Republic of Korea]:
For his important contributions to the discovery and further elucidation of unusual phenomena in solid ^4He , which has stimulated a new era of investigation of quantum solids.
- **Max Hofheinz** [CEA Saclay, France]:
For his leading role in the generation of Fock states in superconducting quantum circuits and the realization of arbitrary quantum states in superconducting resonators.
- **Mika Sillanpaa** [Aalto University, Finland]:
For his original contributions in coherent quantum information transfer and Landau-Zener interferometry in superconducting qubits.