Norbert Wiener was a mathematician, philosopher, scientist and engineer whose pioneering work in mathematics, computer science, systems control, biology and engineering included the invention of cybernetics, which led to the terms “cyberspace” and “cyborg”. His concern for the human aspects of technology led him into ethics and other aspects of technology and society. 2014 is the 120th anniversary of his birth, and 50 years since his death.

We invite you to the 2014 IEEE Conference on Norbert Wiener in the 21st Century. The conference will focus on Wiener’s work: past, present and future.

With the theme Reintroducing Norbert Wiener, the conference will include:

- Examination of the subsequent development and importance of his research, including multi-disciplinary panels of experts examining specific questions related to his fields
- A current look at the social impact and ethical challenges of technology that he foresaw
- Reminiscences of his life from people who knew him personally
- An important part of the conference will be sessions of research papers on contemporary work related to Wiener’s pioneering contributions. These will be selected from submissions to this open call for papers (CFP).

Topics of interest include, but are not limited to:

- Subsequent 21st Century development of his fields of work (fuzzy sets and modelling, information theory, philosophy, life sciences, interval computation, Brownian motion, analysis under uncertainty, cybernetics and its applications in business, education and society…)
- 21st Century relevance of his societal concerns (information ethics, technology innovation and economic development, robots and the future of work, cyber warfare and crime, science fiction as social commentary…)
- Wiener the person (reminiscences, history of technology including the internet, technology biography, Wiener in India and China…)
- Encouraging new research and publishing in his fields of work.

Conference special events:

- Multi-disciplinary panels of high profile speakers modelled on the Macy conferences crucial for Wiener’s work
- A PhD symposium for students in relevant fields (Monday, June 23)
- IEEE History Milestone and MIT Tour (Monday, June 23)

Keynote speakers from fields related to and influenced by Wiener’s work have been invited, and will include among others social anthropologist Mary Catherine Bateson and cryptographer Bruce Schneier.
CALL FOR PAPERS

Student papers:
We strongly encourage students to submit papers. Best Student Paper Awards will be presented based on both manuscript content and presentation quality.

Professional stream, short papers and posters:
We strongly encourage practicing professionals to submit papers reporting on their experiences or as commentaries on practical applications in their field. While not peer-reviewed, they will be vetted by an editorial group.

Peer-reviewed paper submission:
Authors must prepare papers in the IEEE conference style. Paper submissions will be online via the conference web site www.21stcenturywiener.org/ and should identify the conference topic which they address. Paper selection will be undertaken in two steps:

• Two-page abstracts will be reviewed for relevance, originality and expertise to give successful authors a high level of confidence that their full paper will be accepted by the conference. Abstracts submitted before the November 2013 deadline will receive a response within 4 weeks (e.g. an August 2013 response for a July 2013 submission).
• Full papers in camera-ready IEEE format (4-6 pages) will then be peer reviewed by at least 3 reviewers. Accepted papers presented at the conference will be submitted for inclusion in IEEE Xplore.

CONFERENCE SCHEDULE

• 30 Nov 2013:
  Deadline for Abstracts (2 pages, up to 500 words) to be reviewed for relevance.
  Notification of acceptance for relevance by 31 Dec 2013, or within 28 days if submitted earlier (submissions will be accepted throughout 2013)

• 30 Nov 2013:
  Deadline for special session proposals in addition to activities already listed in this CFP

• 14 Feb 2014:
  Deadline for full papers for peer review (6 pages, IEEE format)

• 20 Feb 2014:
  Deadline for Professional Stream, Short papers, and Posters (will be included in the conference proceedings provided to delegates, but will not be peer-reviewed or submitted to IEEE Xplore)

• 26 May 2014:
  Deadline for Presenter and Earlybird registration

• 23 June 2014:
  Pre-Conference activities:
  - PhD Student Symposium
  - IEEE Milestone Ceremony and MIT Tour

24-26 June 2014:
Conference sessions

NOTE: The Conference is seeking financial sponsors for selected international delegates

We are seeking sponsors to fund selected international delegates (including students) who would make a significant contribution but would not be otherwise able to attend.

Further information can be found at:
www.21stcenturywiener.org