



# AEPSE 2013

The 9<sup>th</sup> Asian-European International Conference on Plasma Surface Engineering

August 25 - 30, 2013

Ramada Plaza Jeju Hotel, Jeju, Korea

## ❖ Abstract Submission

All authors are requested to upload their submission to the conference website. ([www.aepse2013.org](http://www.aepse2013.org))

Please prepare your paper in both PDF format and MS Word format for submission.

The due date for Abstract Submission is **April 30, 2013**.

## ❖ Conference Proceedings

All authors with accepted contributions to AEPSE2013 are invited to submit full papers to the special proceedings of AEPSE2013, which will be published as special issues in nominated international journals such as **Surface and Coatings Technology (SCT)** and other international journals after peer-reviewing.

The deadline of manuscript submission will be **October 7, 2013** only via online submission. The instruction for full papers will be found at the conference website.

([www.aepse2013.org](http://www.aepse2013.org))

## ❖ Registration Fees

Pre-Registration (By June 30, 2013)	Regular	600USD / 630,000KRW
	Student	250USD / 260,000KRW
Late and On-Site (From July 1, 2013)	Regular	650USD / 680,000KRW
	Student	300USD / 310,000KRW

### Regular Registration Fee includes

- Admission to all Sessions, Welcome Reception, Abstract and Program Book, and on-line Proceedings

### Student Registration Fee includes

- Admission to all Sessions, Welcome Reception, Program Book  
- Students should pay additional Proceeding Fee.

## ❖ Venue

Ramada Plaza Jeju Hotel is located on a downtown area in Jeju.

<http://www.ramadajeju.co.kr/ENG>



## ❖ Travel Route

Incheon Int'l Airport → Jeju Int'l Airport → Ramada Plaza Jeju Hotel

60min By airplane      10min By Taxi

## ❖ Contact Us

- Secretary general: Prof. Wonho Choe, KAIST, Korea
- Conference secretary: [capst@skku.edu](mailto:capst@skku.edu)
- Web site : [www.aepse2013.org](http://www.aepse2013.org)

## ❖ Important Dates

- Abstract Submission **April 30, 2013**
- Pre-Registration **June 30, 2013**
- Manuscript Submission **October 7, 2013**

## ❖ Conference Organizers

- Prime organizer: AJC-APSE (Asian Joint Committee for Applied Plasma Science and Engineering )
- Co-organizer: EJC-PISE (European Joint Committee on Plasma and Ion Surface Engineering), and Korea Vacuum Society
- Supporting organizers in Asia and Europe
- Management partner: BizOcean Co.,Ltd
- Sponsors: companies, institutes, public organizations

## ❖ Committees

- Conference Chair : Jeon G. Han (KOR)
- Conference Co-Chair : N. Fujiwara (JPN), U. Helmersson (S),
- Executive Chair : J. H. Boo (KOR)
- Executive Co-Chair : Y. Setsuhara (JPN)
- International Program Committee Chair and Co-Chair: J. K. Kim (KOR) and Y. Setsuhara (JPN)
- Local Organizing Committee Chair : G. Y. Yeom (KOR)

❖ **Scope for AEPSE2013**

**1. Fundamental Science and Technology of Plasma Surface Engineering**

**1) Fundamentals for plasma and thin films**

- Advanced plasma discharge and simulation
- Design, modeling and simulation of functional film materials
- Plasma diagnostics and plasma chemistry

**2) Plasma sources and processes**

- Magnetron sputtering, HiPIMS, Hybrid plasma
- PECVD, MOPECVD, Plasma ALD
- Atmospheric and high pressure plasma
- Plasma diffusion and thermal plasma
- Plasma in solution

**3) Functional films, coatings and surface functionalization**

- Tribological coating: wear resistance, low friction, etc.
- Hard and super hard coatings: nano composite, compounds
- Corrosion and high temperature protection, etc.
- Digital electronics: TCO, barrier and functional films for display, touch panel and flexible electronics, etc.
- Green energy and environment: PV, thermoelectric, LED electrochromic, battery, catalytic, toxic gas treatment, etc.
- Functional surface treatment: topography, grafting, texturing
- Plasma medicine and bio technology

**4) Plasma medicine and bio technology**

- Functional medicine materials and processes by plasma
- Bio functional materials, films and surface treatment by plasma

**5) Analysis and evaluation of thin films and surface**

**6) Industrial technology and application**

**2. Workshop for Frontier plasma technology**

**This sessions are jointly organized btw AJC-APSE and EJC-PISE as dedicated special program with nominated specialists on state of art and future perspective.**

- Advanced Plasma -Bio Convergence Technology
- Roll-to-Roll Plasma Systems and Processes for TCO Materials and Flexible Materials
- New Plasma -Nano Materials and Devices

**3. Industry Exhibition and Marketing**

- Industry exhibition will be held on Aug. 27 to 28, 2013
- Technical programs will be organized for exhibitors and companies for their technology and marketing

❖ **Plenary Speakers**

**1. Challenge of plasma surface engineering for next generation industry**

- Prof. Guenter Braeuer, FhG IST (Germany)

**2. Next generation plasma sources**

- Richard Gottscho, LAM Research(USA)

**3. Plasma nano processes**

- Prof. K. Ono, Kyoto university (Japan)

**4. Perspective of ion beam technology**

- Prof. W. Moeller, IIBPMR (Germany)

**5. Hard and tribological coating**

- Prof. C. Mitterer, University of Leoben (Austria)

**6. Advanced films and processes by plasma for digital electronics**

- TBD (AJC)

**7. Plasma-Polymer materials**

- TBD (AJC)

**8. Plasma medicine innovation**

- TBD (AJC)

❖ **Invited Speakers**

**Nano technology for synthesis of functional inorganic materials**

- Prof. Sanjay Mathur, University of Cologne (Germany)

**Advances in Atmospheric Plasmas**

- Prof. Ando Akira, Tohoku Univ. (Japan)

**Bio medical coatings**

- Prof. Sandra Carvalho, University of Minho (Portugal)

**Electron beams and plasma processes**

- Dr. Ventzek Peter, TEL (USA)

**Innovative low friction and high wear resistant coatings for industrial applications**

- Dr. Roel Tietma, Hauzer (NL)

**Super lubrication coating for energy**

- Dr. Ali Erdemir, Argonne National Lab. (USA)

**Self-lubricant coatings for high temp. applications**

- Prof. A. Cavaleiro (Portugal)

**HIPIIMS : Fundamental to industrial applications**

- Dr. Bandorf, Fraunhofer IST (Germany)

**Nanocomposite coatings**

- Dr. Jean François Pierson, Institute Jean Lamour(France)

**Modeling of plasma discharges**

- Dr. Tomas Kubart, Uppsala University (Sweden)

**Electron beam plasma source**

- Prof. Christine Charles (Australia)

**Bio functional polymer film synthesis by plasma process**

- Prof. Dheerawan, Chiangmai (Thai)

**More nominated speakers on advanced topics will be invited for special topical sessions from Japan, China, Korea and other countries !!!**