April 11		Time
16:30-18:30	Session 0 : Jaeyoung Lee **Opening of the Symposium** Jaeyoung Lee (Conference Chair) **OS M Eiswirth** (Fritz-Haber-Institut der Max-Planck-Gesellschaft, Germany) ▶ Surface Chemistry – Quo Vadis? **IS1 H Varela** (University of São Paulo, Brazil) ▶ The influence of temperature on the oscillatory electro-oxidation of small organic molecules **KS1 H Kim** (Seoul National University, South Korea) ▶ Fuel Cell as a Green Energy Alternative	120
18:30-20:30	**Welcome reception**	120
April 12		Time
08:10-08:50	*Registration*	40
08:50-10:30	Session 1 : Peter Strasser **KS2 A Friedrich** (German Aerospace Center, Germany) ▶ Fuel Cells for Aircraft Application **IS2 T Homma** (Waseda University, Japan) ▶ Electrochemical approaches for fabrication of micro/ nano scale functional structures and devices **IS3 S Daniele** (University of Venice, Italy) ▶ Investigation of formic acid electrooxidation at mesoporous platinum microelectrodes. The effect of temperature, anion and bismuth ad-atoms	100
10:30-11:00	*Coffee Break*	30
11:00-12:40	Session 2 : Masatoshi Osawa **KS3 R Schuster** (Karlsruhe Institute of Technology, Germany) ▶ Electrochemical Microcalorimetry **IS4 P Parmananda** (IIT Bombay, India) ▶ Coupling electrochemical oscillators **IS5 H Jensen** (University of Copenhagen, Denmark) ▶ Electrochemical at ITIES as a Microanalytical Tool for Nanoliter Analyte Detection and Sample Preparation	100
12:40-14:20	*Lunch & Ertl center Visit*	100
14:20-15:50	Session 3 : T Homma **KS4 P Plath** (Minir-Chemie-Informatik, Germany) ▶ Battery – Forecast via Synergetics **OS1 JM Lee** (Ertl center, South Korea) ▶ Phase Transformation of Thermoelectric Bismuth Telluride Nanowires as a Result of an Annealing Process **IS6 G Ganteför** (University of Konstanz, Germany) ▶ Chances and Challenges of Cluster Chemistry	90
15:50-16:20	*Coffee Break & Photograph*	30
16:20-18:00	Session 4 : Andreas Friedrich **IS7 SI Woo** (KAIST, South Korea) ▶ Reliable Combinatorial method for Fuel cell Electrode and MEA **OS2 JJ Woo** (GIST, South Korea) ▶ Enhanced fuel cell performance under humidified and non-humidified conditions by the structural modification of a polymer electrolyte membrane **IS8 HJ Lee** (Kyungpook National University, South Korea) ▶ Creating ITIES for Ion-selective Sensing and Fuel Cell Applications **OS3 S Haram** (University of Pune, India) ▶ Synergistic Effect of Carbon Nanotubes Support on Electrocatalytic Properties of Silver in the Nitrate Ions Reduction	100
18:00-20:30	**Poster Session** (K Nielsch, H Varela, M Behrens, YD Kim, H Jensen) Beer & Wine Party	150

April 13		Time
08:10-08:40	*Registration*	30
08:40-10:20	Session 5 : Olaf Magnussen **KS5 E Savinova** (University of Strasbourg, France) ▶ Interplay of the electrochemical reaction and diffusion in 3D nanoparticle arrays **IS9 BS Mun** (Hanyang University, South Korea) ▶ The study of Pd70Au30(110) surface properties under CO, O_2 and CO+O_2 elevated pressures **IS10 P Maire** (Paul Scherrer Institut, Switzerland) ▶ In situ methods for the investigation of lithium batteries	100
10:20-10:50	*Coffee Break*	30
10:50-12:40	Session 6 : Salvatore Daniele **IS11 Z Ding** (The University of Western Ontario, Canada) ▶ Electrochemical Avenue toward Cu(In,Ga)Se2 –Based Solar Cells **O4 G-G Park** (Korea Institute of Energy Research, South Korea) ▶ Temperature cycling effects on the durability of polymer electrolyte fuel cells **IS12 K Nielsch** (University of Hamburg, Germany) ▶ Multifunctional Cylindrical Nanoobjects: From ALD Growth towards Physical Model Systems **IS13 JS Yu** (Korea University, South Korea) ▶ Ordered hierarchical nanostructured carbon as a highly efficient catalyst support in low-temperature fuel cell	110
12:40-14:00	*Lunch & Ertl center Visit*	80
14:00-15:50	Session 7 : Pascal Maire **IS14 O Magnussen** (University of Kiel, Germany) ▶ In situ Video-STM studies of the surface reconstruction of Cu(100) electrodes during hydrogen evolution **IS15 SW Nam** (Korea Institute of Science and Technology, South Korea) ▶ Sulfur-tolerant Ni-based anodes for high-temperature fuel cells **OS5 S Uhm** (Ertl center, South Korea) ▶ Synthesis and Electrochemical Activity of PGM-free Cathode Catalysts in Alkaline Ethanol Fuel Cells **IS16 J Cheng** (University of California Riverside, USA) ▶ Biosensing with SPR-Active Surface: Exploring Cell-Surface Phenomenon in Combination with Electrochemistry and Mass Spectrometry	110
15:50-16:20	*Coffee Break*	30
16:20-18:10	Session 8 : Zhifeng Ding **IS17 IS Kim** (GIST, South Korea) ▶ Bioelectricity and biohydrogen production through biocatalyzed electron harvesting from organic compounds in microbial fuel cell-based systems **IS18 M Behrens** (Fritz-Haber-Institut der Max-Planck-Gesellschaft, Germany) ▶ Synthesis of high performance Cu-based catalysts active in the conversion of carbon dioxide to methanol **IS19 J Starke** (Technical University of Denmark, Denmark) ▶ Deterministic and stochastic modelling of catalytic surface processes **OS6 J Choi** (Inha University, South Korea) ▶ Potential shock method for through-hole TiO2 nanotubes	110
18:10-20:40	Markus Eiswirth *Poster Award Ceremony (Seung-Hyeon Moon & Jaeyoung Lee)* *Congratulatory Remarks (President of GIST)* *Korean Traditional Music Concerts (MOHO)* **Symposium Dinner**	150

April 14		Time
08:10-08:40	*Registration*	30
08:40-10:20	Session 9 : Hye Jin Lee **KS6 H Girault** (Ecole Polytechnique Fédérale de Lausanne, Switzerland) ▶ Molecular electrocatalysis at soft interfaces : Oxygen reduction by amphiphilic porphyrins **IS20 YD Kim** (Sungkyunkwan University, South Korea) ▶ Photocatalytic activity of various TiO2 nanostructures **IS21 C Pereira** (University of Porto, Portugal) ▶ Characterization of catecholamines electrochemical sensors	100
10:20-10:50	*Coffee Break*	30
10:50-12:40	Session 10 : JS Yu **KS7 M Koper** (Leiden University, The Netherlands) ▶ Electrocatalysis at gold **IS22 M Osawa** (Hokkaido University, Japan) ▶ Role of bridge-bonded formate in formic acid electrooxidation on Pt : Reaction intermediate or site-blocking spectator? **IS23 P Strasser** (TU Berlin, Germany) ▶ Tuning surface electrocatalytic reactivity using core-shell structural concepts **Close of Symposium** (P Strasser)	110
12:40-13:30	*Lunch*	50
13:30-20:00	**Excursion** Naganeupseong Folk Village & Damyang (30,000won/person)	