Program

5th International Conference on
Electrophoretic Deposition:
Fundamentals and Applications

October 5-10, 2014
Hernstein, Austria

Conference Chair

Prof. Aldo R. Boccaccini
Department of Materials Science and Engineering
University of Erlangen-Nuremberg, Germany

Conference Co-Chairs

Prof. Omer Van der Biest
Department of Metallurgy and Materials Engineering
Katholieke Universiteit Leuven, Belgium

Prof. James Dickerson
Center of Functional Nanomaterials
Brookhaven National Laboratory, USA

Dr. Tetsuo Uchikoshi
National Institute for Materials Science, Japan
Schloss Hernstein
Berndorfer Straße 32
A-2560 Hernstein
Austria
Tel: +43 (0)2633 47 251
Engineering Conferences International (ECI) is a not-for-profit global engineering conferences program, originally established in 1962, that provides opportunities for the exploration of problems and issues of concern to engineers and scientists from many disciplines.

ECI BOARD MEMBERS

Barry C. Buckland, President
Mike Betenbaugh
Peter Gray
Michael King
Raymond McCabe
David Robinson
William Sachs
Eugene Schaefer
P. Somasundaran

Chair of ECI Conferences Committee: William Sachs

ECI Technical Liaison for this conference: Ram Darolia

ECI Executive Director: Barbara K. Hickernell

ECI Associate Director: Kevin M. Korpics

©Engineering Conferences International
Organizing Committee Members

C. Argirusis (Greece)
C. Bellmann (Germany)
L. D. Besra (India)
A. R. Boccaccini (Germany)
C. R. Buie (USA)
G. Cao (USA)
M. Y. Castro (Spain)
R. Cloots (Belgium)
F. De Riccardis (Italy)
J. Dickerson (USA)
G. Falk (Germany)
B. Ferrari (Spain)
C. Galassi (Italy)
E. Garcia (Spain)
J. Grym (Czech Republic)
P. Hope (UK)
C. Kaya (Turkey)
D. Kuscer (Slovenia)
C. Leonelli (Italy)
A. Matsuda (Japan)
D. Desheng Meng (USA)
R. Moreno (Spain)
H. Munakata (Japan)
H. Negishi (Japan)
S. Novak (Slovenia)
B. Raissi (Iran)
K. M. Ryan (Ireland)
M. P. Ryan (UK)
M. J. Santillan (Argentina)
P. Sarkar (Canada)
Y. Shimizu (Japan)
B. Talbot (USA)
T. Uchikoshi (Japan)
O. Vanderbiest (Belgium)
P. Vilarinho (Portugal)
J. Vleugels (Belgium)
I. Zhitomirsky (Canada)
The Conference is endorsed by the following:

The American Ceramic Society

The ElectroChemical Society

The European Ceramic Society
Sunday, October 5, 2014

16:00 – 18:00  Conference Check-in
18:00 – 19:45  Welcome Reception and Wine Tasting in Historic Area
20:00    Dinner

Notes

• Technical sessions will be in the Studio. Parallel sessions will be in the Ophil Hansen Room.
• Poster Sessions will be in the Hofsuite 1-2.
• Meals will be held in the Panorama Restaurant.
• Audiotaping, videotaping and photography of presentations are prohibited.
• Speakers – Please have your presentation loaded onto the conference computer prior to the session start (preferably the day before).
• Speakers – Please leave at least 3-5 minutes for questions and discussion.
• Please do not smoke at any conference functions.
• Turn your mobile telephones to vibrate or off during technical sessions.
• Please write your name on your program so that it can be returned to you if lost or misplaced.
• After the conference, ECI will send an updated participant list to all participants. Please check your listing now and if it needs updating, you may correct it at any time by logging into your ECI account.
Monday, October 6, 2014

07:30 – 08:30  Breakfast buffet

08:30 – 08:45  Conference Introduction  
Conference Chair: Aldo Boccaccini  
ECI Technical Liaison: Ram Darolia

SESSION I: FUNDAMENTALS OF EPD I  
Session Chair: O. van der Biest

08:45 – 09:15  Keynote  
FUNDAMENTALS AND ADVANCED APPLICATIONS OF ELECTROPHORETIC DEPOSITION (EPD)  
Partha Sarkar  
Environment and Carbon Management Division, Alberta Innovates-Technology Futures. Edmonton, Alberta, Canada

09:15 – 09:35  EFFECT OF ELECTRODE REACTIONS DURING AQUEOUS EPD ON BULK SUSPENSION PROPERTIES AND DEPOSITION QUALITY.  
Laxmidhar Besra  
Institute of Minerals and Materials Technology (IMMT), Bhubaneswar, India

09:35 – 09:55  THE USE OF IONIC LIQUIDS: A REAL GREEN CHEMISTRY ALTERNATIVE IN THE ELECTRODEPOSITION AND ELECTROPHORETIC DEPOSITION PROCESSES?  
Gregorio Vargas  
CINVESTAV-Saltillo, Mexico

09:55 – 10:15  SUBSTRATE SELECTION AND MAGAGEMENT STRATEGIES FOR AQUEOUS EPD.  
Peter Hope  
LHV Coatings Ltd. Coleshill, UK

10:15 – 10:35  EFFECT OF ELECTRIC DOUBLE LAYER CHARACTERISTICS ON CHAIN FORMATION OF CERAMIC NANOPARTICLES.  
Babak Raissi  
Materials and Energy Research Center (MERC), Iran

10:35 – 11:00  Coffee break

SESSION II: FUNDAMENTALS OF EPD II  
Session chair: Laxmidhar Besra

11:00 – 11:20  ELECTROPHORETIC (INFILTRATION) DEPOSITION OF THICK CONDUCTING SUBSTRATES  
Aljaž Ivekovič  
Jožef Stefan Institute, Slovenia

11:20 – 11:40  INFLUENCE OF LIGANDS ON THEMOBILITY OF NANOPARTICLES DURING THE ELECTROPHORETIC DEPOSITION.  
Stephan Barcikowski  
Technical Chemistry I, University of Duisburg-Essen, Germany

11:40 – 12:00  UNDERSTANDING THE COLLOIDAL BEHAVIOR OR 45S5 BIOGLASS TO OBTAIN BIOACTIVE GLASS BASED SOFT COATINGS BY EPD  
Sandra Cabanas-Polo  
Institute of Biomaterials, Department of Material Science and Engineering, University of Erlangen-Nuremberg, Germany
Monday, October 6, 2014 (continued)

12:00 – 14:00  Lunch

14:00 – 16:30  Ad hoc sessions and/or free time

16:30 – 17:00  Coffee break

**SESSION III: NOVEL APPROACHES AND MODELING**

**Session chair:** Stephan Barcikowski

17:00 – 17:30  **Keynote**

ADVANCES IN MICROSCALE AND NANOSCALE MECHANISMS OF ELECTROPHORETIC DEPOSITION IN AQUEOUS MEDIA

Guido Falk

University of Saarland, Structural and Functional Ceramics, Germany

17:30 – 17:50  TOWARDS PHENOMENOLOGICAL UNDERSTANDING OF ELECTROPHORETIC DEPOSITION OF BRUSH-LIKE PARTICLES FOR SOLID POLYMER ELECTROLYTES

Diana Golodnitsky

Tel Aviv University, Israel

17:50 – 18:10  CELL ROTATION UNDER DIELECTROPHORETIC FORCES

Guigen Zhang

Department of Bioengineering and IBOE, Clemson University, USA

18:10 – 18:30  HYDRODYNAMIC MODELING OF ELECTROCODEPOSITION ON A ROTATING CYLINDER ELECTRODE

Alexander Vakhrushev

Institute of Mechanics, Ural Branch of the Russian Academy of Sciences, Russia

18:30 – 18:50  PARTICLE-PARTICLE INTERACTION UNDER DIELECTROPHORESIS FOR RAPID PATTERNING

Guigen Zhang

Department of Bioengineering and IBOE, Clemson University, USA

19:30 – 21:00  Dinner

21:00 – 22:00  Social Hour
Tuesday, October 7, 2014

07:30 – 08:30  Breakfast buffet

SESSION IV: FUNCTIONAL FILMS AND DEPOSITS I
Session chair: Tetsuo Uchikoshi

08:30 – 09:00  Keynote
ELECTROPHORETIC DEPOSITION OF COLLOIDAL NANOPARTICLES AND NANOSHEETS
Atsunori Matsuda
Toyohashi University of Technology, Japan

PARALLEL SESSION A

09:00 – 09:20  PIEZOELECTRIC ELEMENTS FOR MULTI-ELEMENT LINEAR-ARRAY TRANSDUCERS PREPARED BY ELECTROPHORETIC DEPOSITION
Danjela Kuscer
Jozef Stefan Institute, Slovenia

09:20 – 09:40  NICKEL OXIDE/ NICKEL COMPOSITE AS SUPERCAPACITOR ELECTRODE VIA ELECTROPHORETIC DEPOSITION
Zoilo González
Instituto de Cerámica y Vidrio (CSIC), Spain

09:40 – 10:00  NICKEL-COBALT DOUBLE HYDROXIDE AND OXIDE DECORATED CARBON NANOTUBES VIA AQUEOUS ELECTROPHORETIC DEPOSITION TOWARDS CATALYTIC APPLICATIONS
Anirudh Balram
Multi-Scale Energy Systems (MuSES) Lab, Department of Mechanical and Aerospace Engineering, The University of Texas at Arlington, USA

10:00 – 10:20  NANOMANUFACTURED HYBRID CARBON NANOMATERIALS FOR IMPROVED ENERGY STORAGE DEVICES USING ELECTROPHORETIC ASSEMBLY
Landon Oakes
Vanderbilt University, USA

10:20 – 10:40  ELECTROPHORETIC DEPOSITION OF APATITE TYPE LANTHANUM SILICATES FOR SOFC HALF-CELL PRODUCTION
Omer Van der Biest
Katholieke Universiteit Lueven, Belgium

PARALLEL SESSION B

SESSION V: EPD IN CERAMIC PROCESSING I
Session Chair: Begoña Ferrari

09:00 – 09:20  ELECTROPHORETIC METHOD FOR FABRICATING POROUS CERAMICS – APPLICATION TO DIFFERENT OXIDE MATERIALS
Kirsten Moritz
Technische Universität Bergakademie Freiberg, Institute of Ceramics, Glass and Construction Materials, Germany

09:20 – 09:40  MICROSTRUCTURE AND DIELECTRIC PROPERTIES RELATIONSHIP OF SR4ND2T14N86O30TUNGSTEN BRONZE THICK FILMS PREPARED BY ELECTROPHORETIC DEPOSITION
Paula. M. Vilarinho
University of Aveiro, Portugal
Tuesday, October 7, 2014 (continued)

09:40 – 10:00  FABRICATION AND CHARACTERIZATION OF 3-D PHOTONIC CRYSTALS OF VARIOUS MICROSPHERES BY ELECTROPHORETIC SELF-ASSEMBLY
Rong-Fuh Louh
Feng Chia University, Taiwan

10:00 – 10:20  MULTILAYERED CERAMIC CONSTRUCTS CREATED BY EPD
Carolina Mochales
“Charité” Universitaetmedizin, Germany

10:20 – 10:40 INFLUENCE OF FORMULATION ADDITIVES ON THE ELECTROPHORETIC MOBILITY AND CORROSION RESISTANCE ENAMEL VITREOUS COATING OBTAINED BY ELECTROPHORETIC DEPOSITION
Josemari Muñoz
Fundación CIDETEC, Spain

10:40 – 11:20  Coffee break

SESSION VI: FUNCTIONAL FILMS AND DEPOSITS II
Session chair: Paula M. Vilarinho

11:20 – 11:50  ELECTROPHORETIC DEPOSITION OF LAYERED AND BLENDED PHOSPHORS FOR WHITE SOLID STATE LIGHTING
Jan Talbot
University of California-San Diego, USA

11:50 – 12:10  ELECTROPHORETIC DEPOSITION OF PHOSPHOR MATERIAL FOR WHITE LIGHT CONVERSION IN LEDS
Ion Stoll
OSRAM Opto Semiconductors GmbH, Germany

12:10 – 12:30  ULTRA-LOW-POWER ELECTROPHORETIC DEPOSITION OF SILICA POWDER USING NONFLAMMABLE ORGANIC SOLVENT
Hideyuki Negishi
National Institute of Advanced Industrial Science and Technology (AIST), Japan

12:30  Lunch / Pick up boxed lunch for those going on excursion to Vienna

12:45 – 18:00  Optional excursion to Vienna
Ad hoc sessions and/or free time

18:30 – 19:30  SESSION VII: POSTER SESSION I

19:30 – 21:00  Dinner

21:00 – 22:00  Social Hour
Wednesday, October 8, 2014

07:30 – 08:30  Breakfast buffet

PARALLEL SESSION C

SESSION VIII-C: EPD OF BIOMATERIALS AND BIOLOGICAL ENTITIES I
Session Chair: Aldo R. Boccaccini

08:30 – 09:00  Keynote
ALTERNATING CURRENT ELECTROPHORETIC DEPOSITION (AC-EPD) OF BIOMOLECULE COATINGS
Bram Neirinck
Katholieke Universiteit Leuven, Belgium

09:00 – 09:20  ELECTROPHORETIC DEPOSITION OF POROUS Ti COATINGS FOR BONE IMPLANTS: IN VITRO AND IN VIVO EVALUATION
Annabel Braem
Katholieke Universiteit Leuven, Belgium

09:20 – 09:40  ELECTROPHORETIC DEPOSITION OF HYDROXYAPATITE AND BIOACTIVE GLASSES COATINGS ON THE Ti6Al4V ALLOY SUBJECTED TO SURFACE MECHANICAL ATTRITION TREATMENT
Joel Faure
Reims University, France

09:40 – 10:00  DESIGN OF HIERARCHICAL SCAFFOLDS BY CATHODIC POLARIZATION
Lina Altomare
Dipartimento di Chimica, Materiali, Ing. Chimica “G. Natta”, Politecnico di Milano, Milan, Italy and INSTM Local Unit Politecnico di Milano, Italy

10:00 – 10:50  Coffee break

SESSION IX-C: EPD OF BIOMATERIALS AND BIOLOGICAL ENTITIES II
Session Chair: Bram Neirinck

10:50 – 11:10  ELECTROPHORETIC DEPOSITION OF NTIO2-NBG/ALGINATE COMPOSITE COATING FOR BONE REPLACEMENT APPLICATIONS
Luis Cordero-Arias
Institute of Biomaterials, Department of Material Science and Engineering, University of Erlangen-Nuremberg, Germany

11:10 – 11:30  ELECTROPHORETIC DEPOSITION AS A BIOFABRICATION TECHNIQUE
Aldo R. Boccaccini
Institute of Biomaterials, Department of Material Science and Engineering, University of Erlangen-Nuremberg, Germany

11:30 – 11:50  ELECTROPHORETIC DEPOSITION OF CHITOSAN-GRAPHENE OXIDE NANOCOMPOSITE COATINGS ON TITANIUM IMPLANTS
Abdolreza Simchi
Sharif University of Technology, Iran

12:00 – 14:00  Lunch

14:00 – 17:00  Ad hoc sessions and/or free time

17:00 – 17:30  Coffee break
17:30 – 19:30  
**STUDENT CONTEST (Rapid firing presentations followed by poster session)**  
Session Chairs: Begoña Ferrari and Carmen Galassi  

- Ivyleen Bernardo Arugay, SEPARATING NANOCLAY MINERALS VIA ELECTROPHORETIC DEPOSITION  
- Raymond Blanga, DEVELOPMENT OF COMPOSITE ELECTROLYTE FOR THE MICROBATTERY APPLICATION  
- Qiang Chen, BIOACTIVE GLASS-BIOPOLYMER MULTILAYER COATINGS FABRICATED BY ELECTROPHORETIC DEPOSITION COMBINED WITH LAYER-BY-LAYER ASSEMBLY  
- Luis Eduardo Cordero Arias, ELECTROPHORETIC DEPOSITION OF COMPOSITE BIOACTIVE COATINGS BASED ON CHITOSAN AND SOL-GEL DERIVED BIOACTIVE GLASSES  
- Pietro Galizia, THICK COMPOSITE MAGNETO-DIELECTRIC FILMS PRODUCED BY ELECTROPHORETIC DEPOSITION  
- Namir S. Jackoub Raddaha, STUDY OF THE ELECTROPHORETIC DEPOSITION FOR "CHITOSAN/HALLOYSITE NANOTUBES/TITANIUM DIOXIDE"COMPOSITE USING TAGUCHI EXPERIMENTAL DESIGN APPROACH  
- Sven Koenen, ELECTROPHORETIC DEPOSITION OF LIGAND-FREE NANOPARTICLE AS APPLICATION FOR THE NANOSTRUCTURING OF ELECTRODES FOR THE TREATMENT OF PARKINSON’S DISEASE.  
- Mehdi Mehrali, ELECTROPHORETIC DEPOSITION OF CALCIUM SILICATE–REDUCED GRAPHENE OXIDE COMPOSITES ON TITANIUM DENTAL IMPLANT  
- Carlos Mendoza Gallego, DISPERSION AND ELECTROPHORETIC DEPOSITION OF TIN AND TIC NANOPARTICLES  
- Silvina Claudia Real, ELECTROPHORETIC DEPOSITION OF ZNO NANOSTRUCTURES: AU NANO-CLUSTER ON THE SUBSTRATES INDUCE NANOWIRE GROWTH  
- Christian Rodríguez Alemán, DEPOSITION OF ALUMINUM-CARBON COMPOSITES ON ALUMINUM SUBSTRATES BY ELECTROPHORETIC DEPOSITION PROCESS: EFFECT OF PULSED ELECTRIC FIELD  
- Stephen Tay, AN ENVIRONMENTALLY FRIENDLY SOLUTION PROCESSING OF EARTH-ABUNDANT AND NON-TOXIC MATERIALS FOR PHOTOVOLTAICS  
- Despoina Vriami, ALIGNMENT OF ZIRCONIA DURING ELECTROPHORETIC DEPOSITION IN A STRONG MAGNETIC FIELD  
- S. Farid S. Shirazi, IN VITRO AND MECHANICAL PROPERTIES EVALUATION OF NANO-WIRE CALCIUM SILICATE COATING ON TITANIUM SUBSTRATE VIA EPD METHOD  
- Yaroslava Selenskikh, ELECTROPHORETIC DEPOSITION OF THERMAL BARRIER COATINGS  

20:00 – 22:00  
Dinner
07:30 – 08:30 Breakfast

**PARALLEL SESSION D**

**SESSION VIII-D: NANOSTRUCTURED MATERIALS AND FILMS I**

**Session Chair:** James H. Dickerson

08:30 – 09:00 **Keynote**

ELECTROPHORETIC DEPOSITION AS A ROUTE TO FORMATION OF HIGHLY ORDERED SEMICONDUCTOR NANOROD ASSEMBLIES ON SUBSTRATES

Kevin M. Ryan
University of Limerick, Ireland

09:00 – 09:20 TOWARD THE FULL YIELD OF THE EPD PROCESS FOR SHAPING HIGHLY ORIENTED FILMS MADE OF PLATELET-LIKE NANOSTRUCTURES

Begoña Ferrari
ICV-CSIC, Spain

09:20 – 09:40 TITANIA NANOPARTICLE FILM PREPARED BY ELECTROPHORETIC DEPOSITION WITH DC CONSTANT CURRENT CONDITION

Yasushige Mori
Doshisha University, Japan

09:40 – 10:00 ELECTROPHORETIC DEPOSITION OF NANOPARTICLES AS ELECTROCATALYSTS FOR ELECTROLYSIS IN THE SOLAR SULFUR AMMONIA HYDROGEN PRODUCTION CYCLE

Jan Talbot
University of California at San Diego, USA

10:00 – 10:50 Coffee break

**SESSION IX-D: NANOSTRUCTURED MATERIALS AND FILMS II**

**Session Chair:** Jan Talbot

10:50 – 11:10 EPD AS A POWERFUL TOOL TO CONTROL THE DEPOSITION PROCESS OF DENSE AND POROUS FILMS USING SOL-GEL TECHNOLOGY

Yolanda Castro
ICV-CSIC, Spain

11:10 – 11:30 ELECTROPHORETIC DEPOSITION OF NANOPARTICLES FOR CONTROLLED OPTICAL PROPERTIES

Guillaume Toquer
ENSCM, France

11:30 – 11:50 TOWARD DYNAMIC CONTROL OF NANOPARTICLE MONOLAYERS FABRICATED BY ELECTROPHORETIC DEPOSITION

James H. Dickerson
CFN-Brookhaven National Laboratory, USA

See the Wednesday afternoon and evening schedule on the previous page.
Thursday, October 9, 2014

07:30 – 08:30  Breakfast buffet

**SESSION X: POLYMERS AND COMPOSITE COATINGS**  
*Session chair:* Kevin Ryan

08:30 – 09:00  **Keynote**  
**ELECTROPHORETIC DEPOSITION AT THE INTERFACE OF IMMISCIBLE LIQUIDS**  
Cullen Buie  
Massachusetts Institute of Technology, USA

09:00 – 09:20  **ELECTROPHORETIC DEPOSITION OF POLY-ETHER-ETHER KETONE (PEEK) FROM AQUEOUS SUSPENSIONS**  
Aljaž Ivekovic  
Jožef Stefan Institute, Slovenia

09:20 – 09:40  **ELECTROPHORETIC DEPOSITION OF LIGNIN REINFORCED POLYMER COATINGS**  
M. Federica De Riccardis  
ENEA, Italy

**SESSION XI: EPD IN CERAMIC PROCESSING II**  
*Session Chair:* Andrew Pascall

09:40 – 10:00  **Cu$_3$TeO$_6$ THICK FILMS: PROCESSING BY ELECTROPHORETIC DEPOSITION AND ELECTRICAL CHARACTERIZATION**  
Paula M. Vilarinho  
University of Aveiro, Portugal

10:00 – 10:20  **INSERTION OF BOEHMITE PARTICLES FROM AQUEOUS COLLOID SUSPENSION INTO ANODIC FILM SUPPORTED ON ALUMINIUM**  
Florent Caubert  
Centre Inter-universitaire de Recherche et d'Ingénierie des Matériaux, France

10:20 – 11:00  Coffee break

11:00 – 11:20  **PZT FILM ON SILICON BY ELECTROPHORETIC DEPOSITION**  
Carmen Galassi, CNR-ISTEC, Italy

11:20 – 11:40  **SURFACE MODIFICATION OF COMPLEX OXIDE POWDER WITH POLYELECTROLYTE LAYERS IMPROVING EPD CHARACTERISTICS**  
Tetsuo Uchikoshi  
National Institute for Materials Science, Japan

11:40 – 12:30  *Ad hoc* discussions

12:30 – 14:00  Lunch

14:00 – 16:30  *Ad hoc* sessions and/or free time

16:30 – 17:00  Afternoon Coffee

17:00 – 18.00  **SESSION XII: POSTER SESSION II**

19:30 – 21:00  Conference Banquet

21:00 – 22:00  Social Hour
Friday, October 10, 2014

07:30 – 08:30  Breakfast buffet

SESSION XIII: ADVANCED EXPERIMENTAL TECHNIQUES
Session chair: Atsunori Matsuda

08:30 – 08:50 PARTICLE ASSEMBLY OF MICRON AND NANO SCALE MATERIALS WITH PARTICLE-TO-PARTICLE PRECISION BY ELECTROPHORETIC DEPOSITION
Andrew Pascall
Lawrence Livermore National Laboratory, USA

08:50 – 09:10 FABRICATION OF C-AXIS-ORIENTED ZEOLITE L SEED LAYER ON POROUS ZIRCONIA SUBSTRATE BY ELECTROPHORETIC DEPOSITION IN STRONG MAGNETIC FIELD
Chika Matsunaga
National Institute of Materials Science, Japan

09:10 – 09:30 CRYSTALLINE-ORIENTED BETA-SIALON:EU2+ PHOSPHOR DEPOSITS FABRICATED BY ELECTROPHORETIC DEPOSITION WITHIN A STRONG MAGNETIC FIELD: PREPARATION PROCESS AND PHOTOLUMINESCENCE PROPERTY DEPENDING ON ORIENTATION
Tetsuo Uchikoshi
National Institute of Materials Science, Japan

09:30 – 09:50 ELECTROPHORETIC DEPOSITION AS AN ADDITIVE MANUFACTURING TECHNIQUE
Andrew Pascall
Lawrence Livermore National Laboratory, USA

09:50 – 10:20 Coffee Break

10:20 – 11:30 Conclusions
(Next EPD conference, industrial involvement, scientific network on EPD, European projects, increased participation of “Electrochemistry Community”, educational matters, etc.)

12:00 Lunch and departures
List of Posters

1. PREPARATION OF ZSM-5 ZEOLITE MEMBRANES BY COMBINED HYDROTHERMAL SYNTHESIS AND ELECTROPHORETIC DEPOSITION
   Hideyuki Negishi
   National Institute of Advanced Industrial Science and Technology (AIST), Japan

2. ELECTROPHORETIC DEPOSITION OF GELATIN/HYDROXYAPATITE COMPOSITE COATINGS ONTO A STAINLESS STEEL SUBSTRATE
   Františka Frajkorová
   Brno University of Technology, Czech Republic

3. DEVELOPMENT AND CHARACTERIZATION OF PEEK/B2O3-DOPED 45S5 BIOACTIVE GLASS COMPOSITE COATINGS OBTAINED BY ELECTROPHORETIC DEPOSITION
   Aldo R. Boccaccini
   Institute of Biomaterials, University Erlangen-Nuremberg, Germany

4. ELECTROPHORETIC CO-DEPOSITION OF CHITOSAN AND GRAPHENE OXIDE FOR DEVELOPING BIOMEDICAL COATINGS WITH ANTIBACTERIAL EFFECT
   A. R. Boccaccini
   Institute of Biomaterials, University Erlangen-Nuremberg, Germany

5. ELECTROPHORETIC DEPOSITION OF METAL NANOPARTICLES ON SEMICONDUCTORS FOR SCHOTTKY-BARRIER HYDROGEN SENSORS
   Jan Grym
   Institute of Photonics and Electronics, ASCR, Prague, Czech Republic

6. ELECTROPHORETIC VINYL POLYMERS PREPARED VIA ATOM TRANSFER RADICAL POLYMERIZATION AND SMART COATING ON METALS
   Tomomi Kameyama
   Department of Frontier Materials, Graduate School of Engineering, Nagoya Institute of Technology, Japan

7. ZNO-BASED GAS SENSORS PREPARED BY EPD AND HYDROTHERMAL GROWTH
   Roman Yatskiv
   Institute of Photonics and Electronics, ASCR, Prague, Czech Republic

8. DESIGN OF ELECTROPHORETIC POLY(2-OXAZOLINE)S FOR HYBRIDIZATION WITH BIOACTIVE GLASS
   Terunari Hayashi
   Department of Frontier Materials, Graduate School of Engineering, Nagoya Institute of Technology, Japan

9. ELECTROPHORETIC DEPOSITION OF PRECIPITATED POLYAMIC ACID ON POROUS SUPPORTS
   Libor Brabec
   J. Heyrovsky Institute of Physical Chemistry of the ASCR, v.v.i., Prague 8, Czech Republic,
10. MICRO FIBRES CONTAINING LAMINATES PREPARED BY EPD: MICROSTRUCTURE AND FRACTURE BEHAVIOUR
Zdenek Chlup
CEITEC IPM, Institute of Physics of Materials ASCR, Zizkova 22, 616 62 Brno, Czech Republic

11. MICRO FIBRES CONTAINING LAMINATES PREPARED BY EPD: KINETICS OF CO-DEPOSITION
Hynek Hadraba
CEITEC IPM, Institute of Physics of Materials ASCR, Zizkova 22, 616 62 Brno, Czech Republic

12. DEVICE SCALE ELECTROPHORETIC DEPOSITION OF BAND GAP TUNABLE CdSeXs1-X NANORODS
Kevin M. Ryan
Materials and Surface Science Institute, University of Limerick, Ireland

13. ROLL-TO-ROLL MANUFACTURING OF PRISTINE NANOCARBON MATERIALS FOR ENERGY DEVICE APPLICATIONS
Landon Oakes
Vanderbilt University, USA

14. ELECTROPHORETIC CHARACTERIZATION OF CLAY MINERAL SYSTEMS FOR SMECTITE RECOVERY
Jill Manapat
University of the Philippines

15. OPTIMIZATION OF ELECTROPHORETIC DEPOSITION AND CHARACTERIZATION OF CHITOSAN/45S5 BIOGLASS® COMPOSITE COATINGS ON POROUS TITANIUM FOR BIOMEDICAL APPLICATIONS
A. R. Boccaccini
Institute of Biomaterials, University Erlangen-Nuremberg, Germany

16. ELECTROPHORETIC DEPOSITION OF Mn1.5 Co1.5 O4 ON CROFER22APU FOR APPLICATION IN SOLID OXIDE FUEL CELLS
Sandra Cabanas-Polo
Department of Materials Science and Engineering, Institute of Biomaterials, University of Erlangen-Nuremberg, Germany

17. K0.5Na0.5NbO3 THICK FILMS PREPARED BY ELECTROPHORETIC DEPOSITION
Paula M. Vilarinho
Department of Materials and Ceramic Engineering, CICECO, University of Aveiro, 3810-193 Aveiro, Portugal

18. MODIFICATION OF POLYANILINE-BASED GAS SENSOR BY ELECTROPHORETIC DEPOSITION OF METAL NANOPARTICLES IN IONIC LIQUID
Pavol Kunzo
Institute of Electrical Engineering SAS, Bratislava, Slovakia
19. ELECTROPHORETIC CO-DEPOSITION OF COPPER AND CARBON ON A HIGH CARBON STEEL SUBSTRATE UNDER NON-ASYMMETRIC AC ELECTRIC FIELDS
Christian Rodriguez Aleman
Cinvestav-Saltillo, Mexico

20. FABRICATION OF SOLID OXIDE FUEL CELLS (SOFCs) ELECTROLYTES BY ELECTROPHORETIC DEPOSITION (EPD) AND OPTIMIZING THE PROCESS
Babak Raissi
Materials and Energy Research Center, Iran

21. AFFECTABILITY OF CERAMIC NANOPARTICLES OF DIFFERENT COMPOUND FROM SURFACE CHARACTERISTICS IN AC ELECTROPHORETIC DEPOSITION
Babak Raissi
Materials and Energy Research Center

22. DEVELOPMENT OF COMPOSITE ELECTROLYTE FOR THE MICROBATTERY APPLICATION
Ray Blanga
Tel Aviv University, Israel