

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



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The Conference is endorsed by the following:



The American Ceramic Society



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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-Salttillo, Mexico

09:55 – 10:15 SUBSTRATE SELECTION AND MANAGEMENT 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 THE MOBILITY OF NANOPARTICLES DURING THE ELECTROPHORETIC DEPOSITION.
Stephan Barcikowski
Technical Chemistry I, University of Duisburg-Essen, Germany

11:40 – 12:00 UNDERSTANDING THE COLLOIDAL BEHAVIOR OF 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 AQUOEUS 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 SR4ND2TI4NB6O30TUNGSTEN 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

Wednesday, October 8, 2014 (continued)

17:30 – 19:30

STUDENT CONTEST (*Rapid firing presentations followed by poster session*)
Session Chairs: Begoña Ferrari and Carmen Galassi

Ivyleen Bernardo Arugay, SEPARATING NANOCCLAY 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

Wednesday, October 8, 2014

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_3TeO_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 CDSEX_{S1-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 MN_{1.5} CO_{1.5} 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. K_{0.5}NA_{0.5}NBO₃ 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-Salttillo, 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