OVERVIEW OF SESSIONS AND CONTRIBUTIONS

SUNDAY, NOVEMBER 22

12:00 REGISTRATION

14:00-14:25 WELCOME & OPENING

14:00 **Welcome**
14:15 **10 Years of CCA. What did we achieve?**
H. C. Freyhardt
University of Houston, USA

14:25-15:55 SESSION A: HTS APPLICATIONS REQUIREMENTS

14:25 **Futurred: towards the 2025 Spanish Grid**
S. Cascante
Spanish Electric Grid Platform, Spain
14:55 **Design of Coated Conductors for FCL**
P. Tixador, N. T. Nguyen, C. Barnier
Institut Néel/ G2Elab, CNRS, Grenoble, France
15:10 **Applications and Requirements for YBCO Coated Conductors in Fault Current Limiters**
M. Noe
Karlsruhe Institute of Technology, Institute for Technical Physics, Germany
15:25 **Development of REBCO superconducting motors in Japan**
M. Iwakuma, Y. Hase, T. Satou, A. Tomioka, Y. Iijima, T. Saitoh, Y. Yamada, T. Izumi, Y. Shiohara
Kyushu University, Japan
15:40 **High efficient superconducting motors for 100 up to 1000 kWs using 2G tapes**
T. Reis
Oswald Elektromotoren GmbH, Germany

15:55-16:25 COFFEE/TEA BREAK

16:25-17:35 SESSION A: continued

16:25 **High Field Magnets with YBCO coated conductors**
D. Larbalestier, U. Trociewitz, H. W. Weijers, W. D. Markiewicz, P. Noyes, Y. Viouchkov, J. Jaroszynski, A. Xu
Applied Superconductivity Center, Florida State University, USA
16:40 **Development of HTS Power Cable - Requirements for Wire**
K. Hayashi
Sumitomo Electric Industries, Japan
16:55 **Update on HTS cables**
C.-E. Bruzek and Jean maxime Saugrain
Nexans France, France
17:10 **The R&D status of HTS Power Cable in DAPAS Program**
J. Cho, S.-K. Lee, B.-M. Yang
Korea Electrotechnology Research Institute, Korea
17:25 **Development of REBCO HTS cables in Japan**
N. Fujiwara, Y. Shiohara, T. Masuda, S. Mukoyama, T. Saitoh, Y. Aoki
International Superconductivity Technology Center, ISTEC, Japan

17:35-18:05 **DISCUSSION ON SESSION A**

18:05-19:05 POSTER SESSION

A-P01: **Kinetics of response and recovery of CC based fault current limiting devices**
A. Usoskin, D. Krischel, A. Handaze, A. Rutt, B. Prause, K. Schlenga, F. Mumford
Bruker HTS GmbH, Germany

A-P02: **Finite element modelization of the magnetization of a radial flux superconducting low power motor**
R. Maynou, J. Lopez, R. Torres, X. Granados
Escola Universitària d'Enginyeria Tècnica Industrial de Barcelona, UPC, Spain

A-P03: **Striated strands for ROEBEL cables**
S. Terzieva, R. Nast, W. Goldacker, A. Kudymow, F. Grilli
Forschungszentrum Karlsruhe, Institute for Technical Physics, Germany

A-P04: **Steady State Modelling of a HTSC Cable in PSS/E for Grid Impact Analysis**
G. Del Rosario, **A. Sumper**, X. Granados, A. Sudrià-Andreu
Escola Universitària d'Enginyeria Tècnica Industrial de Barcelona, UPC, Spain

C-P05: **Sustainable CSD methods for coated conductor designs**
P. Vermeir, J. Feys, I. Cardinael, N. Van de Velde, V. Cloet, V. Narayanan, M. Bäcker, O. Brunkahl, J. Bennewitz, P. Lommens, J. Schaubroeck, K. De Buysser, I. Van Driessche
Ghent University, Belgium

C-P06: **Effect of Humidity of Ar-5%H_2 Processing Atmosphere on Epitaxy of $(Ce_{0.8}Gd_{0.2})O_2$ and $La_{2+x}Zr_{2-x}O_7$ Buffered Ni-5%W RABITS Produced Using Chemical Solution Deposition**
M. Rikel, S. Mahachi, M. Klein, J. Schütz, J. Ehrenberg, J. Bock
Nexans SuperConductors GmbH, Germany

C-P07: **Decomposition and Reformation of YBCO Layer during Multiple MOD-TFA Coatings**
M. Rikel, S. Mahachi, B. Hoppe, J. Bock
Nexans SuperConductors GmbH, Germany

C-P08: **Chemical process for buffers layers**
S. Petit, J. L. Soubeyroux, P. Odier, V. Roche, E. Sarigiannidou, C. Jiménez, D. Luneau
CRETA, Grenoble, France

C-P09: **Mechanical stability of CeO_2 buffer layers for coated conductors**
J. J. Roa, F. Espiell, M. Segarra, E. Gilioli, F. Bissoli, F. Pattini, S. Rampino
Centro DIOPMA, University of Barcelona, Spain

C-P10: **Improvement of surface roughness of metallic substrate using MOD oxide layer for highly in plane textured IBAD-MgO buffer layer**
Y. Takahashi, A. Ibi, T. Ito, S. Miyata, H. Hatakeyama, M. Yoshizumi, T. Izumi, Y. Shiohara, Y. Aoki, T. Hasegawa
Superconductivity Research Laboratory, ISTEC, Japan

C-P11: **Application of textured IBAD-TiN layers in coated conductor architectures**
R. Hühne, R. Gärtner, K. Güth, L. Schultz, B. Holzapfel
IFW Dresden, Germany

C-P12: **Highly reproducible inkjet deposition of smooth and biaxially textured cerium gadolinium oxide layer**
M. Mosiadz, R. I. Tomov, S. C. Hopkins, B. A. Glowacki, G. Martin, B. Holzapfel
Department of Materials Science and Metallurgy, University of Cambridge, UK

C-P13: **Inkjet printing of superconducting layers**
M. Vilardell, S. Ricart, X. Granados, T. Puig, X. Obradors, J. Bennewitz, M. Bäcker, M. Mosiadz, S. C. Hopkins, B. A. Glowacki
Institut de Ciència de Materials de Barcelona-CSIC, Spain

C-P14: **MOD Deposition of $Ce_{0.9}Zr_{0.1}O_{2-y}$ Single Buffer Layer for $YBa_2Cu_3O_{7-x}$ Coated Conductors**
V. R. Vlad, A. Pomar, A. Llordes, A. Palau, T. Puig, X. Obradors, A. Usoskin
Institut de Ciència de Materials de Barcelona-CSIC, Spain

C-P15: **Fast pyrolysis and low fluorine precursors for YBCO film growth**
X. Palmer, N. Romà, S. Ricart, A. Pomar, T. Puig, X.Obradors
Institut de Ciència de Materials de Barcelona-CSIC, Spain

C-P16: **Intermediate phase evolution and growth of high critical current YBCO thin films by TFA-MOD process**
K. Zalamova, A. Pomar, T. Puig, X. Obradors
Institut de Ciència de Materials de Barcelona-CSIC, Spain

C-P17: **Growth kinetics and its influence on microstructure and critical current of TFA-YBCO films under low-pressure conditions**
H. Chen, **K. Zalamova**, A. Pomar, X. Granados. T. Puig, X. Obradors
Institut de Ciència de Materials de Barcelona-CSIC, Spain

C-P18: **Fabrication of Thick SmBCO/IBAD-MgO Coated Conductors using co-evaporation for High Critical Current**
H. S. Ha, D. K. Kang, R. K. Ko, S. S. Oh, H.K. Kim, S.H. Moon, C. Park, D. Youm
Korea Electrotechnology Research Institute, Korea

C-P19: **Evolution of $Y_1Ba_2Cu_3O_{7-x}$ films derived from low fluorine propionate precursors coating solution**
A. Angrisani Armenio, **G. Celentano**, V. Galluzzi, A. Mancini, A. Augieri, A. Rufoloni, A. Vannozzi, L. Ciontea, T. Petrisor, I. Davoli, I. Colantoni, G. Contini
ENEA, Frascati Research Centre, Italy

C-P20 **Ink-jet printing of water-based YBa2Cu3Ox coatings and patterns**
J. Feys, P. Vermeir, M. Bäcker, B.A. Glowacki, P. Lommens, K. De Buysser, I Van Driessche
Ghent University, Belgium

20:00 DINNER

MONDAY, NOVEMBER 23

08:30-09:50 SESSION B: CHALLENGES IN LONG LENGTH SCALE UP OF HIGH PERFORMANCE COATED CONDUCTORS

08:30 **Present Status of Long PLD-IBAD Tapes in Japan**
S. Lee, **K. Tanabe**, N. Chikumoto, K. Nakao, A. Ibi, S. Miyata, Y. Yamada, M. Yoshizumi, T. Izumi, Y. Shiohara
Superconductivity Research Laboratory, ISTEC, Japan

08:45 **Scaling up PLD-based CCs**
A. Usoskin, M. Waschulewski, K. Schlenga
Bruker HTS GmbH, Germany

09:00 **Status and outlook for IBAD-MOCVD-based coated conductors**
V. Selvamanickam, Y. Chen, G. Carota, Y. Qiao, A. Rar, A. Knoll, Y. Xie, J. Dackow
University of Houston, USA

09:15 **R&D status of long length coated conductor in Korea**
S.-S. Oh
Korea Electrotechnology Research Institute, Korea

09:30 **Development of GdBCO Coated Conductor on 30mm Wide Clad-Type Textured Metal Substrates**
K. Hayashi
Sumitomo Electric Industries, LTD, Japan

09:40 **Multi-filamentary process for various coated conductors by laser scribing method**
T. Machi, K. Tanabe
Superconductivity Research Laboratory, ISTEC, Japan

09:50-10:20 COFFEE/TEA BREAK

10:20-12:50 SESSION C: STRATEGIES TOWARD LOW-COST COATED CONDUCTORS

10:20 **Improving Performance of RABiTS/MOD-YBCO-based 2G Wire**
M. Rupich, X. Li, S. Sathyamurthy, C. Thieme. S. Fleshler, X. Liu
American Superconductor Corporation, USA

10:35 **Development of MOD-based Processing for Low Cost Coated Conductors**
T. Izumi, M. Yoshizumi, M. Miura, K. Nakaoka, Y. Takahashi, H. Hirano, Y. Yamada, Y. Shiohara, Y. Aoki, T. Koizumi, T. Nakanishi, T. Kaneko, T. Hasegawa
Superconductivity Research Laboratory, ISTEC, Japan

10:50 **High rate all-solution deposited YBCO coated conductors**
D. Wesolowski, P. Clem
Sandia National Laboratory, USA

11:05 **Advances in TFA $YBa_2Cu_3O_7$ thin film growth**
T. Puig, K. Zalamova, A. Llordés, H. Chen, F. Martínez, A. Palau, S. Ricart, A. Pomar, X. Obradors
Institut de Ciència de Materials de Barcelona-CSIC, Spain

11:20 **Interlayer Mitigation and Fabrication of High-Ic Conductors from Thick Multi-coated MOD Precursors**
R. Feenstra, J. Sinclair, E. D. Specht, J. R. Thompson, D. K. Christen, D. J. Miller, V. A. Maroni, A. Xu, D. C. Larbalestier, X. Li, S. Sathyamurthy, M. W. Rupich
Oak Ridge National Laboratory, USA

11:35 **Optimization of YBCO Nucleation on Technical Buffers**
V. Solovyov, Q. Li, J. Qing, Z. Jie, K. Develos-Bagarinao
Brookhaven National Laboratory, USA

11:50 **HTS films grown by reactive coevaporation on simplified coated conductor IBAD-MgO templates for low cost manufacturing**
B. Moeckly, V. Matias
Superconductor Technologies, Inc., USA

12:05 **Ink-jet printing of Coated Conductors**
J. Bennewitz, M. Steffens, M. Bäcker, K. Varel, J. Feys, I. Van Driessche, S. Hopkins, B. A. Glowacki
Zenergy Power GmbH, Germany

12:20 **Development of MOCVD-YBCO carrying higher currents on chemically coated buffers**
R. Muydinov, G. Bräuer, O. Stadel
Institut für Oberflächentechnik, Braunschweig, Germany

12:30 **Planarization of Metallic Substrate for IBAD-MgO by MOD-GZO Layers**
T. Izumi
Superconductivity Research Laboratory, ISTEC, Japan

12:40 **$La_2Zr_2O_7$ layers obtained by MOD as a single buffer layer for low cost coated conductors**
P. Odier, S. Petit, N. Guibadj, Z. Yu, S. Morlens, J. L. Souyberoux, T. Caroff , P. Chaudouët, L. Rapenne, V. Roche, E. Sarigiannidou, C. Jiménez
Institut Néel/CRETA- CNRS, France

12:50-13:50 LUNCH

13:50-16:05 SESSION D1: EFFECTIVE APPROACHES TO ENHANCE COATED CONDUCTORS PERFORMANCE: PINNING AND CRITICAL CURRENTS

13:50 **Thermal fluctuations and the limits to vortex pinning in superconductors**
L. Civale
Los Alamos National Laboratory, USA

14:05 **Effect of strain and incorporation of double-perovskite-based Ta- and Nb- oxides on flux-pinning in coated conductors**
A. Goyal, S.H. Wee, E. Specht, Y. Zuev, C. Cantoni and Y. Gao
Oak Ridge National Laboratory, USA

14:20 **Improved in-field performance in MOCVD-based coated conductors**
V. Selvamanickam, G. Majkic, B. Zhang, A. Guevara, I. Kesgin, Y. Zhang, Y. Chen, G. Carota, A. Rar, Y. Xie, S. Sambandam, J. Dackow, A. Goyal, C. Cantoni, Y. Zuev
University of Houston, USA

14:35 **High Current, Low Cost YBCO Conductors– What's Next?**
J L MacManus-Driscoll, S. C. Wimbush, S. A. Harrington, J. H. Durrell, G. Ercolano, A. Kursumovic
University of Cambridge, UK

14:50 **Microstrain influence on vortex pinning in YBCO nanocomposites grown from metal organic solutions**
A. Pomar, T. Puig, A. Llordés, A. Palau, V. R. Vlad, J. Gazquez, P. Abellan, J. Gutiérrez, F. Sandiumenge, S. Ricart, X. Obradors, D. Grebille, D. Chateigner
Institut de Ciència de Materials de Barcelona-CSIC, Spain

15:05 **Relationships between JC enhancement and dimensionality of artificial pinning centers**
M. Mukaida, H. Kai, M. Takamura, R. Teranishi, N. Mori, A. Ichinose, S. Horii, Y. Yoshida, K. Matsumoto, P. Mele, R. Kita
Kyushu University, Japan

15:20 **Nano-Engineering of Phase Separable Inclusions in High Performance YBCO Thick Films for Coated Conductors**
T. Holesinger, D. M. Feldmann, J. Y. Coulter, B. Maiorov, L. Civale
Los Alamos National Laboratory, USA

15:35 **Irreversibility Line up to 65T in Nanoparticles Dispersed TFA-MOD YGdBCO Coated Conductors**
M. Miura, S. A. Baily, B. Maiorov, L. Civale, J. O. Willis, T. Izumi, K. Tanabe, Y. Shiohara
Superconductivity Research Laboratory, ISTEC, Japan

15:50 **Influence of the deposition temperature on the superconducting properties of YBCO/BZO quasimultilayers**
A. Kießling, **J. Hänisch**, E. Reich, T. Thersleff, B. Holzapfel, L. Schultz, M. Weigand, J. Durrell
IFW Dresden, Germany

16:05-16:35 COFFEE/TEA BREAK

16:35-16:55 SESSION D1: continued

16:35 **In-Field Critical Current of $YBa_2Cu_3O_{7-x}$ Films with Correlated Pinning Centers by 3D Computer Simulations of Vortex Dynamics**
J. Rodriguez
California State University, USA

16:45 **Multipurpose Additions to YBCO Thin Films**
S. Harrington, J. Durrell, H. Wang, J. MacManus-Driscoll
University of Cambridge, UK

16:55-17:45 SESSION D2: EFFECTIVE APPROACHES TO ENHANCE COATED CONDUCTORS PERFORMANCE: BEYOND PINNING

16:55 **Effect of Strain on Flux Pinning in YBCO Coated Conductors**
D. C. van der Laan, J. F. Douglas, C. C. Clickner, T. C. Stauffer, L. F. Goodrich, M. W. Rupich, Y. Y. Xie, A. Usoskin, H. C. Freyhardt

National Institute of Standards and Technology, and University of Colorado, USA

17:10 **Application of textured highly alloyed Ni-W tapes for coated conductors**
R. Hühne, J. Eickemeyer, U. Gaitzsch, T. Thersleff, J. Freudenberger, L. Schultz, B. Holzapfel, O. de Haas, V. S. Sarma, M. Weigand, J. H. Durrell
IFW Dresden, Germany

17:25 **Development of cube textured nickel-copper-tungsten substrate for YBCO coated conductors**
A. Vannozzi, A. Mancini, A. Angrisani Armenio, A. Augieri, V. Galluzzi, A. Rufoloni, G. Celentano, M. Nasui, L. Ciontea, T. Petrisor
ENEA Centro Ricerche Frascati, Italy

17:35 **Development of advanced texture templates for YBCO coated tapes**
H. L. Suo, Y. Zhao, **M. M. Gao**, M. Liu, L. Ma, J.-C. Grivel
Beijing University of Technology, China

17:45-18:45 POSTER SESSION

B-P21: **Alternating beam assisted deposition (ABAD) and it's up-scaling towards large area manufacturing of HTS coated conductors**
A. Hallbauer, L. Kirchhoff, A. Rutt, K. Schlenga, A. Usoskin
Bruker HTS GmbH, Germany

D1-P22: **Preparation of YBCO thin film- nanoparticle heterostructures in a novel PLD-Sputtering System**
M. Sparing, R. Hühne, S. Fähler, J. Hänisch, B. Rellinghaus, L. Schultz, B. Holzapfel
IFW Dresden, Germany

D1-P23: **Ac susceptibility analysis of YBCO-BZO nanocomposites with isotropic-strong pinning**
E. Bartolomé, A. Palau, T. Puig, X. Obradors
Escola Universitaria Salesiana de Sarrià, Barcelona, Spain

D1-P24: **Pinning energetic analysis of different artificial defects in YBCO using the Bitter decoration technique**
R. Luccas, A. Palau, X. Granados, T. Puig, X. Obradors
Institut de Ciència de Materials de Barcelona-CSIC, Spain

D1-P25: **Effect of Strain on Flux Pinning in YBCO Coated Conductors**
J. Douglas, D. C. van der Laan, M. W. Rupich, X. Y. Xie, A. Usoskin, H. C. Freyhardt
National Institute of Standards and Technology, USA

D1-P26: **Thickness Dependent Grain Boundary Properties in ex situ YBCO Films on Rolling Assisted Biaxially Textured Substrates**
R. Feenstra, E. D. Specht, J. R. Thompson, D. K. Christen, A. Palau, D. M. Feldmann, T. G. Holesinger, M. W. Rupich
Oak Ridge National Laboratory, USA

D1-P27: **Current transport properties of $Gd_1Ba_2Cu_3O_{7-x}$ coated conductor deposited by the in-plume PLD reel-to-reel technique**
R. Fuger, T. Kiss, M. Inoue, N. Chikumoto, S. Lee, Y. Yamada, T. Izumi
Kyushu University, Japan

D1-P28: **Angular dependence of in-field E-J characteristics in GdBCO coated conductor**
M. Inoue, K. Higashikawa, R. Fuger, T. Kiss, M. Namba, S. Awaji, K. Watanabe, A. Ibi, S. Miyata, Y. Yamada, T. Izumi
Kyushu University, Japan

D1-P29: **Effective magnetic pinning in YBCO using orthoferrite $RFeO_3$**
S. Wimbush, J. H. Durrell, S. A. Harrington, J. L. MacManus-Driscoll, H. Wang
University of Cambridge, UK

D1-P30: **Enhanced flux pinning in $YBa_2Cu_3O_{7-x}$ thin films using YBa_2NbO_6 additions**
G. Ercolano, S. A. Harrington, J. L. MacManus-Driscoll, H. Wang, C. F. Tsai
University of Cambridge, UK

D1-P31: **Synthesis of nanoparticles and its application to obtain HTSC nanocomposite thin films: Ex situ approach**
F. Martínez- Julián, S. Ricart, A. Pomar, A. Palau, T. Puig, X. Obrador, L. Pérez-Mirabet, R. Yáñez, J. Ros, I. Pastoriza-Santos, L. Liz-Marzán
Institut de Ciència de Materials de Barcelona-CSIC, Spain

D1-P32: **Control of $Ba(Er_{0.5}Nb_{0.5})O_3$ nanorods in PLD-$ErBa_2Cu_3O_{7-x}$ films**
M. Mukaida, H. Kai, R. Teranishi, N. Mori, A. Ichinose, S. Horii, Y. Yoshida, K. Matsumoto, R. Kita
Kyushu University, Japan

D2-P33: **Filament transposition for reduction of AC losses in CC tapes**
G. Kotzyba, R. Nast, B. Ringsdorf, W. Goldacker, R. Semerad
Karlsruhe Institute of Technology, Germany

D2-P34: **Experimentally determined transport and magnetization ac losses of small cable models constructed from YBCO coated conductors**
J. Šouc, M. Vojenčiak, F. Gömöry
Institute of Electrical Engineering, Slovak Republic

D3-P35: **Magnetization AC loss of stacks made from YBCO coated conductors with various substrates**
M. Vojenciak, J. Souc, F. Gömöry, E. Pardo
Institute of Electrical Engineering, Slovak Republic

D3-P36: **Computed current distribution in HTS tapes obtained from Hall magnetic mapping by inverse problem solution**
M. Carrera, J. Amorós, X. Granados, R. Maynou, T. Puig, X. Obradors
Universitat de Lleida, Spain

D3-P37: **Critical currents in meandered coated conductors for Roebel cables**
M. Chudy, J. Emhofer, E. Pardo, F. Hengstberger, M. Eisterer, H. W. Weber
Vienna University of Technology, Atominstitut, Austria

D3-P38: **Homogeneous Flux Flow Dissipation in GdBCO PLD/IBAD Superconducting Tapes**
A. Matsekh, M. Inoue, T. Kiss, S. Miyata, A. Ibi, Y. Yamada, T. Izumi
Kyushu University, Japan

20:00 DINNER

TUESDAY, NOVEMBER 24

08:30-10:00 SESSION D2: continued

08:30 **Recent Progress in the Theory of HTS Cable AC Loss**
A. Malozemoff
American Superconductor Corp., USA

08:45 **Influence of magnetic substrate on ac loss characteristics of two-layer cables comprising coated conductors**
N. Amemiya, N. Fujiwara
Kyoto University, Japan

09:00 **AC loss of CC tape on bilayer ferromagnetic substrate**
F. Gömöry
Institute of Electrical Engineering, Slovak Republic

09:15 **New ideas to reduce ac losses in CCs (Low ac loss $YBa_2Cu_3O_7$ conductors for applications)**
B. Glowacki, N. A. Rutter, M. Majoros
University of Cambridge, UK

09:30 **Simulation of ac loss in Roebel coated conductor cables**
F. Grilli, E. Pardo, M. Vojenciak, S. Terzieva
Karlsruhe Institute of Technology, Germany

09:40 **Electromagnetic response of curved superconducting tapes conforming to a cylinder**
Y. Mawatari
National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan

09:50 **Effect of coupling in low-loss coated conductor structures: striated tapes and Roebel cables**
E. Pardo, M. Eisterer, H. W. Weber
Atominstitut, Vienna University of Technology, Austria

10:00-10:30 COFFEE/TEA BREAK

10:30-12:05 SESSION D3: EFFECTIVE APPROACHES TO ENHANCE COATED CONDUCTORS PERFORMANCE: CHARACTERIZATION

10:30 **Non-destructive characterization techniques for long-length coated conductors**
K. Tanabe, T. Hato, T. Machi, J. Kawano, S. Adachi, K. Nakao
Superconductivity Research Laboratory, ISTEC, Japan

10:45 **Influence of chemistry on nucleation and growth in TFA-MOD coated conductors**
D. J. Miller, V. A. Maroni, N. J. Zaluzec, Z. Chen, K. Cooley, X. Li, S. Sathyamurthy, M. Rupich, R. Feenstra
Argonne National Laboratory, USA

11:00 **Advanced characterization techniques for coated conductors (cc's)**
H. Weber
Atominstitut, Vienna University of Technology, Austria

11:15 **Thermal stability characterization of coated conductors under over-currents using transport and optical measurements**
J. Pelegrin, E. Martínez, **L. A. Angurel**, N. Andrés, M. P. Arroyo, Y. Y. Xie, V. Selvamanickam
Instituto de Ciencia de Materiales de Aragón, Spain

11:30 **Characterization of dissipation evolution at $YBa_2Cu_3O_{7-x}$ grain boundaries using low-temperature near-field scanning microwave microscopy**
J. R. Dizon, **J. Z. Wu,** T. Haugan, P. Barnes
University of Kansas, USA

11:45 **Effect of pinning enhancement techniques on the critical current of grain boundaries in coated conductors**
J. H. Durrell, S. A. Harrington, S. C. Wimbush, J. L. MacManus-Driscoll
University of Cambridge, UK

11:55 **Visualization of Time-Dependent AC Loss Distribution for Coated Conductors**
K. Higashikawa, Y. Honda, M. Inoue, M. Iwakuma, T. Kiss, K. Nakao, Y. Yamada, T. Izumi
Kyushu University, Japan

12:05-12:50 SESSION E: NEW VISIONS FOR COATED CONDUCTOR APPLICATIONS

12:05 **Design of a Compact, Lightweight Superconducting Power Transmission Cable for Specialized High Power Applications**
T. J. Haugan, P. N. Barnes
Air Force Research Laboratory, USA

12:20 **Possible new concepts for AC CC- cables with very high currents**
W. Goldacker, S. I. Schlachter, A. Kudymow, A. Drechsler, S. Terzieva
Karlsruhe Institute of Technology, Germany

12:35 **Is it possible to get what we really want from YBCO– a multifilament, preferably a round-wire conductor?**
D. Larbalestier
Applied Superconductivity Center, Florida State University, USA

12:50-13:50 LUNCH

13:50-14:25 SESSION E: continued

13:50 **New U.S. DOE initiatives in Superconductivity research**
L. Civale
Los Alamos National Laboratory, USA

14:05 **Epitaxial Growth of Superconductor on Structural, Single-Crystal, Faceted Fibers (SSIFFS): A Potential Route Towards Low ac-loss Wire**
A. Goyal, S.H. Wee, E. Specht, Y. Zuev and C. Cantoni
Oak Ridge National Laboratory, USA

14:15 **Energy Efficiency and Environmental Benefits of Superconducting Option in Distribution Level Grids**
O. Romedenne, **X. Granados**, T. Puig, X. Obradors, S. Cascante
Institut de Ciència de Materials de Barcelona-CSIC, Spain

14:25-15:25 ROUND TABLE PARALLEL DISCUSSION (SESSIONS B,C,D1,D2)

15:25-16:05 SUMMARIES OF ROUND TABLE DISCUSSION

16:05-16:30 CLOSING