

JUNE 28		FRIDAY AFTERNOON
		7 TH IUVSTA COURSE
16:00		TUTORIAL V-X-RAY ABSORPTION SPECTROSCOPY: XANES AND EXAFS TECHNIQUES
		LECTURER GLORIA SUBÍAS-PERUGA
		Instituto de Ciencia de Materiales de Aragón (ICMA)
		CSIC- Universidad de Zaragoza
		Pza. San Francisco s/n, 50009 - Zaragoza (Spain)
17:00		COFFEE BREAK
		TUTORIAL V-X-RAY ABSORPTION SPECTROSCOPY: XANES AND EXAFS TECHNIQUES (Continues)
		LECTURER GLORIA SUBÍAS-PERUGA
		Instituto de Ciencia de Materiales de Aragón (ICMA)
		CSIC- Universidad de Zaragoza
18:00		Pza. San Francisco s/n, 50009 - Zaragoza (Spain)

JUNE 30		FRIDAY MORNING
		7 TH IUVSTA COURSE
10:00		FUTURE OF SYNCHROTRON RADIATION: LASERS AND ALTERNATIVE DEVELOPMENTS
		LECTURER: M.C. ASENSIO
		Instituto de Ciencia de Materiales de Madrid
		CSIC
		28049 MADRID
11:00		COFFEE BREAK
		X-RAY ABSORPTION SPECTROSCOPY: XANES AND EXAFS TECHNIQUES
		LECTURER: GLORIA SUBIAS-PERUGA
		Instituto de Ciencia de Materiales de Aragón (ICMA)
		CSIC- Universidad de Zaragoza
		Pza. San Francisco s/n, 50009 - Zaragoza (Spain)
12:00		
13:00		

JUNE 28		THURSDAY AFTERNOON
		7 TH IUVSTA COURSE
16:00		TUTORIAL IV-SURFACE DIFFRACTION AND STRUCTURAL METHODS
		LECTURER: XAVIER TORRELLES
		Instituto de Ciencia de Materiales de Barcelona
		CSIC
		08193 Bellaterra-Barcelona
17:00		COFFEE BREAK
		TUTORIAL IV-SURFACE DIFFRACTION AND STRUCTURAL METHODS (Continues)
		LECTURER: XAVIER TORRELLES
		Instituto de Ciencia de Materiales de Barcelona
		CSIC
18:00		08193 Bellaterra-Barcelona

		7 TH IUVSTA COURSE
10:00		INTERNATIONAL SYNCHROTRON RADIATION RESEARCH: ACCESS AND PROJECT PRESENTATION
		LECTURER: M.C. ASENSIO
		Instituto de Ciencia de Materiales de Madrid
		CSIC
		28049 MADRID
11:00		COFFEE BREAK
		SURFACE DIFFRACTION AND STRUCTURAL METHODS
		LECTURER: XAVIER TORRELLES
		Instituto de Ciencia de Materiales de Barcelona
		CSIC
12:00		08193 Bellaterra-Barcelona
13:00		

IUVSTA COURSE CONTINUES

JUNE 28		WEDNESDAY AFTERNOON	
POSTER SESSION	ETCHC-RIVA-TF-RIVA-SS-JS1-JS2		
Chairmen:	A. Barranco. ICMSE.ES V. Teixeira. Universidade do Minho. PT		
POSTER SESSION	RIVA-SS	JS1-WeA-P.3	OPTICAL CHARACTERIZATION OF VACUUM EVAPORATED CdZnTe THIN FILMS DEPOSITED BY STACKED LAYER METHOD. G.G. Rusu, M. Rusu, M. Girtan. Faculty of Physics, "Al.I. Cuza" University, B-dul Carol I, No. 11, Iasi, Romania (e-mail: rusugkg@uaic.ro)
RIVA-SS-WeA-P.1	TiCr ALLOYS OF LOW SECONDARY ELECTRON EMISSION FOR ANTIMULTIPACTOR APPLICATIONS. G. G. Fuentes and R. J. Rodríguez, AIN-Centro de Ingeniería Avanzada de Superficies, Cordovilla, 31191, Pamplona, Spain. L. Galán, Departamento de Física Aplicada. Universidad Autónoma de Madrid. Cantoblanco. 28049-Madrid. Spain. I. Montero and J. L. Segovia, Instituto de Ciencia de Materiales de Madrid. CSIC. Cantoblanco. 28049-Madrid. Spain	JS1-WeA-P.4	PHOTOLUMINESCENCE AND BAND-SPLITTING IN CDS THIN FILMS, INFLUENCE OF CDCL₂ AND THERMAL ANNEALING. O. Vigil-Galán , G. Contreras-Puente, and J. Aguilar-Hernández. Escuela Superior de Física y Matemáticas, Instituto Politécnico Nacional, México 07738 D.F. J. Vidal-Larramendi, and A. Arias-Carbajal. Univ. de la Habana, 43100, La Habana, Cuba. O. Zelaya-Angel. Departamento de Física. CINVESTAV-IPN. P.O. Box 14-740. México 07260 D.F.
RIVA-SS-WeA-P.2	SECONDARY ELECTRON EMISSION YIELDS OF EXTERNAL DIELECTRIC COATINGS USED IN SPACE. Isabel Montero , Ainhoa Pardo, Pablo Rios and José Luis de Segovia. Instituto de Ciencia de Materiales de Madrid. CSIC. Cantoblanco. 28049-Madrid. Spain. Luis Galán. Universidad Autónoma de Madrid. Cantoblanco. 28049-Madrid. Spain. Léon Lévy. Office National d'Etudes et de Recherche Aérospatiales, 2 Avenue Edouard Belin, 31055 Toulouse, Cedex 4, France. Marc Van Eesbeek. <i>European Space Research and Technology Centre (ESTEC). European Space Agency (ESA). Keplerlaan 1. PO Box</i>	JS1-WeA-P.5	PHOTOLUMINESCENCE OF RHODAMINE 6G DOPED AMORPHOUS TiO₂ THIN FILMS GROWN BY SOL-GEL. R. Palomino-Merino ¹ , J. Torres-Kauffman ¹ , R. Lozada-Morales ¹ , and O. Portillo-Moreno ² , Benemérita Universidad. Autónoma de Puebla. ¹ Posgrado en Optoelectrónica, Facultad de Ciencias Físico-Matemáticas. ² Facultad de Ciencias Químicas. México. M. García-Rocha, and O. Zelaya-Angel. Department of Physics. Centro de Investigación y de Estudios Avanzados del IPN. P.O. Box 14-740,
RIVA-SS-WeA-P.3	ELECTRON STIMULATED DESORPTION STUDY OF DEFECT SITES ON THE MgO(100) SURFACE USING QUADRUPOLE MASS SPECTROMETRY AND TIME OF FLIGHT. I. Colera ¹ , J. L. de Segovia ¹ , D. Cáceres ¹ , E. Román ¹ and R. González ¹ . ¹ Departamento de Física. Universidad Carlos III de Madrid. Leganés. 28911 Madrid. Spain. ² Laboratorio de Física e Ingeniería de Superficies. Instituto de Ciencia de Materiales. CSIC.Cantoblanco. 28049 Madrid. Spain	JS1-WeA-P.6	DC-PULSED PLASMA NITRIDING (DCPPN) OF STAINLESS STEEL: MICRO-STRUCTURE, CORROSION A WEAR BEHAVIOUR. P. Corengia ¹ , E. De Las Heras ² , M. Brizuela ¹ , D. González ¹ , A. García-Luis ¹ , G. Ybarra ² , C. Moína ² . ¹ Fundación INASMET-Tecnalia, Paseo de Mikeletegi 2, 20009 San Sebastián, Spain. ² Instituto Nacional de Tecnología Industrial, Av. Gral. Paz 5445, C.C. 157, (B1650 WAB) San Martín, Argentina.
POSTER SESSION	RIVA-TF	JS1-WeA-P.7	UHV REACTIVE EVAPORATION GROWTH OF TITANIUM NITRIDE THIN FILMS, LOOKING FOR MULTIPACTOR EFFECT SUPPRESSION IN SPACE APPLICATIONS. Ana Ruiz and Elisa Román. Instituto de Ciencia de Materiales de Madrid. Consejo Superior de Investigaciones Científicas. Cantoblanco. E-28049-Madrid. Spain Pilar Lozano*, Mariano García and Luis Galán. Departamento de Física Aplicada. Universidad Autónoma de Madrid. Cantoblanco. E-28049 Madrid. Spain. Isabel Montero . Instituto
RIVA-TF-WeA-P.1	SEM AND XPS ANALYSIS OF POLYCRYSTALLINE GAN FILMS GROWN BY CYCLIC PULSED LASER DEPOSITION. P. Sanguino ¹ , R. Schwarz ¹ . ¹ Departamento de Física, Instituto Superior Técnico, Lisboa, Portugal. M. Wilhelm ² , M. Kunst ² ² Hahn-Meitner-Institut, Solare Energetik, Berlin, Germany. O. Teodoro ³ Departamento de Física, Universidade Nova de Lisboa, Monte de Caparica, Portugal	JS1-WeA-P.8	ON THE INFLUENCE OF TE EXCESS ON THE OPTICAL PROPERTIES OF VACUUM EVAPORATED ZNTE THIN FILMS. P. Prepelitã ¹ , M.Rusu, C.Baban, G.I.Rusu. Faculty of Physics "Al. I. Cuza" University, B-dul Carol I, No.11, Iasi, Romania. (e-mail: prepelita@stoner.phys.uaic.ro)
RIVA-TF-WeA-P.2	PHOTOCATALYTIC DEGRADATION OF COMMERCIAL DYES USED IN THE TEXTILE INDUSTRY BY THE DEPOSITION TiO₂ THIN FILMS ON GLASS SUBSTRATES. S.M. Marques ¹ , C.J. Tavares ¹ , V. Teixeira ¹ , J.O. Carneiro ¹ , A.J. Fernandes ² . ¹ Departamento de Física, Universidade do Minho, 4800-058 Guimarães, Portugal. ² Departamento de Física, Universidade de Aveiro, 3810-193 Aveiro, Portugal	POSTER SESSION	JS2
RIVA-TF-WeA-P.3	ON THE PHYSICAL PROPERTIES OF PENTACENE THIN FILMS. Mihaela Girtan ^{a,b} Sylvie Dabas — Seignon ^a , J.M. Nunzi ^a . ^a Laboratoire POMA, UMR CNRS 6136, Université d'Angers, 2 Bd. Lavoisier, 49045 Angers cedex, France, email: mihaela.girtan@univ-angers.fr Faculty of Physics, Al.I. Cuza University of Iasi, Romania	JS2-WeA-P.1	IMPROVEMENT OF MECHANICAL PROPERTIES OF STEEL SUBSTRATES SURFACE BY DEPOSITION OF THIN TITANIUM FILMS OBTAINED BY MAGNETRON SPUTTERING METHOD. R. Gheriani . Physical laboratory of Materials, University of Ouargla , 30.000- Algeria. R. Halimi. Unity of research, Materials and applications, University of Constantine, 25.000 — Algeria.
RIVA-TF-WeA-P.4	NITROGEN-DOPED TiO₂ THIN FILMS DEPOSITED ONTO ITO/GLASS SUBSTRATES. Diana Mardare . Al.I.Cuza University, Faculty of Physics, Carol I Blvd., No.11, Iasi 700506, ROMANIA. Luca Dumitru. Al.I.Cuza University, Faculty of Physics, Carol I Blvd., No.11, Iasi 700506, ROMANIA	JS2-WeA-P.2	SYNTHESIS AND CHARACTERIZATION OF THIN HARD COATINGS OF CHROMIUM CARBIDES. L. Aissani . Département de Physique, Centre universitaire de Khenchela, Algérie. C. Harkati, and R. Halimi. Laboratoire Couches Minces et Interfaces, Département de Physique, Faculté des Sciences, Université Mentouri, 25000 Constantine, Algérie.
RIVA-TF-WeA-P.5	VAPOUR SOURCE WITH SUBMONOLAYER CONTROL. H. P. Marques , A. R. Candário, O. M. N. D. Teodoro and A. M. C. Moutinho. CEFITEC, Departamento de Física, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, 2829-516 CAPARICA, Portugal	JS2-WeA-P.3	CARBIDES FORMATION IN TANTALUM THIN LAYERS DEPOSITED ON STEEL SUBSTRATES. Y. Hadjar. Institut de Tronc Commun Sciences Exactes et Technologie, Université de Batna, Algérie, R. Halimi , Laboratoire Couches Minces et Interfaces, Université Mentouri, 25000 Constantine, Algérie.
RIVA-TF-WeA-P.6	AgInTe₂ CHALCOPYRITE THIN FILMS OBTAINED BY ELECTRODEPOSITION TECHNIQUES AND ANNEALING. R. Díaz , F. Rueda Dpto. Física Aplicada Universidad Autónoma de Madrid, 28049 Madrid, Spain. P.Herrasti, E. Vazquez Dpto. Química Física Aplicada Universidad Autónoma de Madrid, 28049 Madrid, Spain. M. Abd el Lefdil Dpt de Physique, Université de Rabat, Maroc	JS2-WeA-P.4	DEPOSITION OF Ti-B-Al-N COATINGS BY MAGNETRON SPUTTERING OF COMPOSITE SHS TARGETS. A. García-Luis ¹ , M. Brizuela, P. Corengia, D. González, I. Agote. INASMET-Tecnalia, Paseo de Mikeletegi 2, 20009 San Sebastián, Spain
RIVA-TF-WeA-P.7	GROWTH OF CRYSTAL GERMANIUM-CARBIDE BY IMPLANTATION. Genene Tessema ^{1,2} ¹ Faculty of Science, Department of Physics, Addis Ababa University, P.O.BOX 1176, Addis Ababa, Ethiopia. ² Helmholtz-Institut für Strahlen und Kernphysik, Nussallee 14-16, 53115 Bonn, Germany	JS2-WeA-P.5	ELABORATION AND CHARACTERIZATION OF THIN TITANIUM COATINGS ON HIGH CARBON STEEL SUBSTRATES. L. Mohammedi. Laboratory of Materials Physic. University of Ouargla — 30 000 — Algeria. R. Gheriani . Laboratory of Materials Physic. University of Ouargla — 30 000 — Algeria. R. Halimi. Laboratoire Couches Minces et Interfaces, Campus Chaâb Errsas, Université Mentouri de Constantine - 25 000 Constantine — Algérie.
POSTER SESSION	JS1	JS2-WeA-P.6	OPTICAL AND STRUCTURAL STUDY OF EB-PVD ZrO₂ THIN FILMS. I. M. Ochando , M. Vila and C. Prieto. Instituto de Ciencia de Materiales de Madrid, Consejo Superior de Investigaciones Científicas. Cantoblanco, 28049 — MADRID, Spain.
JS1-WeA-P.1	^γ_N -SHIFTING AS A FUNCTION OF N₂ CONTENT IN AISI 304 NITRIDING. R. Valencia-Alvarado ^{*a} , A. de la Piedad-Beneitez ⁺ , J. de la Rosa-Vázquez [*] , R. López-Callejas [*] , S. R. Barocio [*] , O. G. Godoy-Cabrera [*] , A. Mercado-Cabrera [*] , R. Peña-Eguiluz [*] and A. E. Muñoz-Castro. [*] Instituto Nacional de Investigaciones Nucleares, Plasma Physics Laboratory, A P. 18-1027, 11801 México, D.F. ⁺ Instituto	JS2-WeA-P.7	OPTICAL AND STRUCTURAL STUDY OF EB-PVD ZrO₂ THIN FILMS. I. M. Ochando , M. Vila and C. Prieto. Instituto de Ciencia de Materiales de Madrid, Consejo Superior de Investigaciones Científicas. Cantoblanco, 28049 — MADRID, Spain.
JS1-WeA-P.2	STUDY OF OPTICAL PROPERTIES OF DIAMOND LIKE CARBON /POROUS SILICON ANTIREFLECTION COATING LAYERS FOR MULTICRYSTALLINE SILICON SOLAR CELL APPLICATIONS. K. Ait-Hamouda . Labo Instrumentation, Faculté d'Electronique et informatique, USTHB, BP 32 El-Alia Bab-azouar Alger, Algérie. M. Ouchabane. CDTA , Haouche Loukil BP17, Baba-Hassen Alger, Algérie. A. Ababou. Labo Instrumentation, Faculté d'Electronique et informatique, USTHB, BP 32 El-Alia Bab-azouar Alger, Algérie. N. Gabouze. UDTs, 28d Frantz Fanon BP 399, Alger Algérie	JS2-WeA-P.8	STUDY OF SOME PROPERTIES OF HARD TUNGSTEN CARBIDE COATINGS. F. Khalfallah, Y. Hadjar, R. Halimi. Laboratoire des Couches Minces et Interfaces, Département de Physique, Faculté des Sciences, Université Mentouri, 25000 Constantine, Algérie.
		JS2-WeA-P.8	NANO TO MICROMETRIC HFCVD DIAMOND ADHESION STRENGTH TO Si₃N₄. F.A. Almeida , M.S. Amaral, F.J. Oliveira, R.F. Silva. Dept. of Ceramics and Glass Engineering, CICECO, Univ. of Aveiro, 3810-193 Aveiro, Portugal. A.J.S. Fernandes. Dept. of Physics, Univ. of Aveiro, 3810-193 Aveiro, Portugal

JUNE 28		WEDNESDAY AFTERNOON	
			ROOM D 7th IUVSTA COURSE
			TUTORIAL III- DIFFRACTION: X-RAY AND PHOTOELECTRONS
			LECTURER: JOSÉ ÁVILA
			Instituto de Ciencia de Materiales de Madrid CSIC 28049 MADRID
16:00		PHYSICS HALL POSTER SESSION RIVA-ETCHC-WS-20	
17:00			
			OUTING AND CONFERENCE DINNER CIUDAD RODRIGO BUSES DEPART FROM THE VENUE

JUNE 28

WEDNESDAY MORNING

09:00 MAIN HALL	WeM-PI.3	FUNCTIONAL CERAMIC THIN FILMS, NEW MATERIALS FOR THE FUTURE, FROM NATURALLY NANOLAMINATED MAX-PHASES TO TAILORED NANOCOMPOSITES OF CARBIDES, OXIDES AND NITRIDES. H. Högberg, Thin Film Physics Division, Department of Physics (IFM), Linköping University, SE-58183 Linköping, Sweden V. Teixeira, Universidade do Minho F. Rueda, Universidad Autónoma de Madrid		
	ROOM C	Join Session: JS2:	HARD COATINGS-TRIBOLOGY	ROOM D 7th IUVSTA COURSE
	Chairmen:	J. M. García F. Vaz	AIN. ES Universidade do Minho. ES	
10:00		JS2-WeM-INV.1	SURFACE ANALYSIS OF NITRIDES AND OXYNITRIDE COMPOUNDS WITH ION BEAMS. E. Alves, N. P. Barradas, Instituto Tecnológico Nuclear, EN. 10, 2686-953 Sacavém .F. Vaz, L. Rebouta, C. Tavares, Universidade do Minho, Departamento de Física, 4800-058 Guimarães, Portugal. U. Kreissig, Forschungszentrum Rossendorf e.V., Postfach 510119, 01314 Dresden, Germany.	
			INSTRUMENTATION ASSOCIATED TO SYNCHROTRON RADIATION INSTALLATIONS II	
			LECTURER: M. C. ASENSIO	
			Instituto de Ciencia de Materiales de Madrid	
			CSIC	
			28049 MADRID	
11:00		COFFEE BREAK		
		JS2-WeM-OR.1	TRIBOLOGICAL PROPERTIES OF SILICON NITRIDE CERAMICS COATED WITH DLC AND DLC-Si AGAINST 316L STAINLESS STEEL J. R. Gomes, Departamento de Engenharia Mecânica, CIICS, Universidade do Minho, 4800-058 Guimarães, Portugal. J. M. Carrapichano. Departamento de Engenharia Mecânica, Instituto Superior de Engenharia de Coimbra, 3040-228 Coimbra, Portugal. S. S. Camargo Jr., R. A. Simão, C. A. Achete. Departamento de Engenharia Metalúrgica e de Materiais, Universidade Federal do Rio de Janeiro, Cx. Postal 68505, 21945-970 Rio de Janeiro, RJ, Brazil. R. F. Silva. Departamento de Engenharia Cerâmica e do Vidro, CICECO, Universidade de Aveiro, 3810-193 Aveiro, Portugal	
			DIFFRACTION: X-RAY AND PHOTOELECTRONS	
			LECTURER: JOSÉ ÁVILA	
		JS2-WeM-OR.2	WEAR RESISTANCE OF TITANIUM-ALUMINIUM-CHROMIUM-NITRIDE NANOCOMPOSITE THIN FILMS. A. Alberdi, M. Marín, B. Díaz. Fundación Tekniker. Avda. Otaola, 20. 20600 Eibar (Spain). O. Sánchez. Institute of Materials Science (ICMM). Cantoblanco, 28049 Madrid (Spain)	
			Instituto de Ciencia de Materiales de Madrid	
			CSIC	
			28049 MADRID	
12:00		JS2-WeM-INV.2	TRIBOLOGICAL CHARACTERIZATION OF METAL CARBIDE/AMORPHOUS CARBON NANOCOMPOSITES: FROM MACRO TO THE MICRO-SCALE. J.C. Sánchez-López*, D. Martínez-Martínez, C. López-Cartes, A. Fernández. Instituto de Ciencia de Materiales de Sevilla, CSIC-Universidad de Sevilla, Avda. América Vespucio 49, 41092-Sevilla, Spain.	
13:00		JS2-WeM-OR.3	TRIBOLOGICAL CHARACTERIZATION OF TUNGSTEN NITRIDE COATING AT ELEVATED TEMPERATURE. T. Polcar, N.M.G. Parreira and A. Cavaleiro ^{o*} . ICEMS — Grupo de Materiais e Engenharia de Superfícies, Faculdade de Ciências e Tecnologia da Universidade de Coimbra — Pólo II, 3030-201 Coimbra, Portugal.	
		JS2-WeM-OR.4	HARDNESS AND TRIBOLOGY MEASUREMENTS ON ZrN COATINGS DEPOSITED BY REACTIVE SPUTTERING TECHNIQUE. M. A. Auger. Departamento de Física. Universidad Carlos III. Avda. de la Universidad, 30. 28911 Leganés, Madrid. Spain. J. J. Araiza. Unidad Académica de Física. Universidad Autónoma de Zacatecas. Avda. Preparatoria N° 301. Fracc. Progreso. Zacatecas, Zac. 98000 Méjico. C. Falcony. Departamento de Física. CINVESTAV-IPN. Aptdo. 14-740. ana Inés de la Cruz, 3. 28049 Cantoblanco, Madrid. Spain.	
		ETCHC-WeM-OR.5	DECORATIVE COATINGS OF TITANIUM OXIDE OBTAINED BY PVD. J.A. García, R. Martínez. M. Rico and R.J. Rodríguez. Asociación de la Industria Navarra. C/San Cosme y San Damián s/n, Pamplona 31191 Spain.	

JUNE 28			WEDNESDAY MORNING				
09:00 MAIN HALL		WeM-PI.3 FUNCTIONAL CERAMIC THIN FILMS, NEW MATERIALS FOR THE FUTURE, FROM NATURALLY NANOLAMINATED MAX-PHASES TO TAILORED NANOCOMPOSITES OF CARBIDES, OXIDES AND NITRIDES. H. Högberg, Thin Film Physics Division, Department of Physics (IFM), Linköping University, SE-58183 Linköping, Sweden Chairmen V. Teixeira Universidade do Min ho F. Rueda Universidad Autónoma de Madrid					
		ROOM A Chairmen	Session: E. Román O. Conde	RIVA-SS: ICM-CSIC. ES Universidade de Lisboa. PT	ROOM B Chairmen	Session: J-O. Teodoro M. Wüest	WS-18 VACUUM QUALITY II Universidade Nova de Lisboa INFICON. FL
10:00		RIVA-SS-WeM-INV.1 STM STUDY OF MODIFICATIONS ON VACUUM FIRED 304L STAINLESS STEEL SURFACES. M. Leisch and A. Stupnik. Institute for Solid State Physics, Graz University of Technology, Petersgasse 16, 8010 Graz, Austria			WS-18-WeM-INV.9 PHYSICAL AND TECHNOLOGICAL ASPECTS OF MEMS VACUUM PACKAGING. F. Völklein, A. Meier, FH Wiesbaden, University of Applied Sciences. Am Brückweg 26, D-65428 Rüsselsheim, Germany		
11:00		COFFEE BREAK					
		RIVA-SS-WeM-OR.1 USE OF A RADIO-FREQUENCY POWER SUPPLY COUPLED TO A HIGH TEMPERATURE FURNACE IN ULTRAVIOLET PHOTOELECTRON SPECTROSCOPY. E. M. C. C. Reis ^{1,2} , A. A. Dias ^{1,2} , O. M. N. D. Teodoro ^{1,2} and M. L. Costa ^{1,2} . ¹ Centre for Physics and Technological Research, CEFITEC. ² Departamento Física Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Monte de Caparica, 2829-516, Caparica, Portugal.			WS-18-TuA-INV.10 SPANISH SYNCHROTRON RAADIATION SPURCE: THE PROJECT AND THE VACUUM SYSTEM. LI. Miralles and E. Al-Dmour. CELLS, Barcelona. Spain		
		RIVA-SS-WeM-OR.2 PLANAR MAGNETRON DISCHARGE. AN EXPERIMENTAL PROFILE ANALYSIS OF THE TARGET EROSION BASED ON A TWO-DIMENSIONAL FLUID MODEL IN THE STEADY STATE. M. L. Escrivão, P. J. S. Pereira*, M. R. Teixeira and M. J. P. Maneira. CeFITec, Departamento de Física, Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa, Quinta da Torre, 2829-516, Caparica, Portugal. * Also in Área Científica da Matemática, Instituto Superior de Engenharia de Lisboa, Rua Conselheiro Emídio Navarro, 1949-014 Lisboa,					
12:00		RIVA-SS-WeM-OR.3 WORK FUNCTION CHANGES INDUCED BY TEMPERATURE IN Ag/TiO ₂ SURFACES. H. P. Marques, A. R. Canário, A. M. C. Moutinho and O. M. N. D. Teodoro. CEFITEC, Departamento de Física, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, 2829-516 CAPARICA, Portugal					
		RIVA-SS-WeM-OR.4 DESIGN OF AN ELECTROSTATIC LENS SYSTEM FOR AN ULTRAVIOLET PHOTOELECTRON SPECTROMETER. R. M. Pinto ^{1,2} , A. A. Dias ^{1,2} and M. L. Costa ^{1,2} . ¹ Centre for Physics and Technological Research, CEFITEC, ² Departamento Física, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Monte de Caparica, 2829-516, Caparica, Portugal			WS-18-WeM-INV.11 QA EFFORTS IN MANUFACTURING LARGE CRYOPUMP SYSTEMS FOR NUCLEAR FUSION APPLICATION. Hans S. Jensen and Chr. Day. Institute for Technical Physics, Forschungszentrum Karlsruhe, 76021 Karlsruhe, Germany		
		RIVA-SS-WeM-OR.5 DEVELOPMENT OF AN APPLICATION FOR MONITORIZATION AND ANALYSIS OF THE ELECTRIC SIGNAL OF AN ULTRAVIOLET PHOTOELECTRON SPECTROMETER. P. M. S. Cristo, A. A. Dias, P. Vieira, M. L. Costa. ¹ Centre for Physics and Technological Research, CEFITEC, ² Departamento Física, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Monte de Caparica, 2829-516, Caparica, Portugal.					
13:00		RIVA-SS-WeM-OR.6 SURFACE ANALYSIS OF NBR ELASTOMERS MODIFIED WITH DIFFERENT PLASMA TREATMENTS. L. Martinez, L. Álvarez, Y. Huttel, J. Méndez, E. Román. Instituto de Ciencia de Materiales de Madrid (ICMM-CSIC) Cantoblanco, 28049-Madrid, Spain. A. Vanhulsel, B. Verheyde, R. Jacobs, Flemish Institute for Technological Research (VITO). Boeretang 200, 2400-MOL, Belgium					
		RIVA-SS-WEM-OR.7 AB INITIO CALCULATIONS FOR THE EXCITED STATE AND THE CATION OF DIPHENYL ETHER AND COMPARISON WITH REMPI EXPERIMENTS. M. Guerra and A. C. S. Paiva. CEFITEC Department of Physics, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, 2829-516, Caparica, Portugal.			WS-18-WeM-INV.12 THE EFFECT OF MECHANICAL AND FRICTIONAL PHENOMENA ON THE QUALITY OF VACUUM IN ADVANCED TECHNOLOGIES. R.A. Nevshupa. Department of Vacuum Mechanics and Tribology (MT-11), Bauman Moscow State Technical University, 2-Baumanskaja 5, Moscow 105005, Russia. J.L. de Segovia, E. Roman. Department of Surface Physics and Engineering, Institute of Material Science of Madrid, C/ Sor Juana Ines de la Cruz 3, Cantoblanco, Madrid 28049, Spain		
		RIVA-SS-WEM-OR.8 THE TRIBOLOGICAL BEHAVIOUR OF W-S-C FILMS IN PIN-ON-DISK TESTING AT ELEVATED TEMPERATURE. M. Evaristo, T. Polcar, A. Cavaleiro, ICEMS - Faculdade de Ciências e Tecnologia da Universidade de Coimbra, Dep. Eng. Mecânica, Rua Luís Reis Santos, 3030-788 Coimbra, Portugal					

	ROOM C	Join Session JS1	ROOM D 7th IUVSTA COURSE
16:00		JOIN SESSION JS1 ROOM A	TUTORIAL II: ANGLE RESOLVED PHOTOEMISSION AND FERMI SURFACE DETERMINATION LECTURER: JUAN F. SANCHEZ Dept. Física Aplicada y Electromagnetismo ICMUV Universidad de Valencia c/ Dr. Moliner 50, 46100 Burjassot Valencia (Spain)
17:00		COFFEE BREAK	
18:00		JOIN SESSION JS1 ROOM A	TUTORIAL II: ANGLE RESOLVED PHOTOEMISSION AND FERMI SURFACE DETERMINATION (Continues) LECTURER: JUAN F. SANCHEZ Dept. Física Aplicada y Electromagnetismo ICMUV Universidad de Valencia c/ Dr. Moliner 50, 46100 Burjassot Valencia (Spain)

JUNE 27		TUESDAY AFTERNOON	
	ROOM A Session: JS1 OPTICAL AND DECORATIVE COATINGS II Chairmen: F. Villendas University of Zaragoza. ES R. Rodriguez. AIN. ES	ROOM B Session: WS-18 VACUUM QUALITY I Charipersons: M.C. Matilla CEM. ES C. Legras. Laboratoire National de Métrologie et d'Essais (LNE)FR	
16:00	JS1-TuA-INV.9 HARD DECORATIVE METAL-OXYNITRIDE THIN FILMS PREPARED BY PVD. F. Vaz, P. Carvalho. Departamento de Física, Universidade do Minho, 4800-058 Guimarães, Portugal.	WS-18-TuA-INV.6 QUALITY CONTROL AND LEAK DETECTION IN LARGE VACUUM SYSTEMS. P. Chiggiato. CERN, European Organization for Nuclear Research. CH-1211 Geneva 23, Switzerland.	
17:00	JS1-TuA-INV.10 DECORATIVE COATINGS ON ENAMEL CERAMICS DEPOSITED BY PVD TECHNIQUES. A. Alberdi. Fundación Tekniker. Avda. Otaola, 20. 20600 Eibar, Spain..F. Lucas, A. Belda. Fritta S.L. CV-20 Km 8, 12200 Onda (Castellón), Spain.Mª José Orts. Instituto de Tecnología Cerámica (ITC). Campus Universitario Riu Sec, 12006 Castellón, Spain	WS-18-TuA-INV.7 THE DESIGN AND OPERATION OF THE JET VACUUM AND FUELLING SYSTEMS AND THEIR RELEVANCE TO ITER. R J H Pearce, Euratom-UKAEA Association, Culham Science Centre, Oxon, OX14 3DB. UK . M. Wykes, ITER IT, IPP, Boltzmannstr. 2, 85748 Garching, Germany	
18:00	JS1-TuM-INV.12 MICROFABRICATION BY DIRECT WRITING ON DIELECTRICS USING ULTRASHORT LASER PULSES. J. Solís, Instituto de Optica, CSIC, Serrano 121, E-28006 Madrid, SPAIN	WS-18-TuA-INV.8 ADVANCED PROCESS AND EQUIPMENT CONTROL (APC/AEC) THROUGH FINE GAS ANALYSIS IN VACUUM SYSTEMS FOR SEMICONDUCTOR MANUFACTURING. Giuseppe FAZIO, ST Microelectronics - Italy	
	S1 SESSION ROUND TABLE CHAIRMAN: J. M. ALBELLA ICMM-CSIC-ES PRESENTERS: A. CAVALEIRO UNIVERSITY OF COIMBRA. PT J.A. GARCÍA AIN, ES F, ORGAZ MEC.ES		

JUNE 27			TUESDAY MORNING		
09:00 MAIN HALL	TuM-Pl.2	THE ROLE OF ENERGETIC IONS IN THE DEVELOPMENT OF MULTILAYERED X-RAY REFLECTION OPTICS.			
	Chairmen	J. Verhoeven FOM AMOLF, Kruislaan 407, 1098SJ Amsterdam, The Netherlands	J. Colligon Manchester University. GB	R. Reid	IUVSTA. GB
	ROOM C	JOIN Session JSI: Optical an Protective Coatings I		ROOM D	7th IUVSTA COURSE
10:00		JOIN SESSION JSI ROOM A		INSTRUMENTATION ASSOCIATED WITH TO SYNCHROTRON RADIATION INSTALLATIONS I	
				LECTURER: M: C. ASENSIO	
				Instituto de Ciencia de Materiales de Madrid	
				CSIC	
				28049 MADRID	
11:00		COFFEE BREAK			
		JOIN SESSION JSI ROOM A		ANGLE RESOLVED PHOTOEMISSION AND FERMI SURFACE DETERMINATION	
				LECTURER: JUAN F. SÁNCHEZ	
				Dept. Física Aplicada y Electromagnetismo	
				ICMUV	
				Universidad de Valencia	
	c/ Dr. Moliner 50, 46100 Burjassot				
12:00		JOIN SESSION JSI ROOM A		Valencia (Spain)	
13:00		JOIN SESSION JSI ROOM A			

JUNE 27		TUESDAY MORNING				
09:00 MAIN HALL	TuM-Pl.2	THE ROLE OF ENERGETIC IONS IN THE DEVELOPMENT OF MULTILAYERED X-RAY REFLECTION OPTICS.				
	Chairmen	J. Verhoeven FOM AMOLF, Kruislaan 407, 1098SJ Amsterdam, The Netherlands	J. Colligon Manchester University. GB	R. Reid	IUVSTA. GB	
	ROOM A	Session: JS1 OPTICAL AND DECORATIVE COATINGS I	ROOM B Session: WS-18 LEAK DETECTION I			
	Chairmen:	A.R. Gozález-Elipe. T. Polcar.	ICMSE. ES Universidade do Coimbra. PT	Chairmen	Ch. Tilford K. Jousten	Independent Consultaning USA PTB. Berlin. D
10:00		JS1-TuM-INV.1 REACTIVE SPUTTERING OF METAL OXIDES AND N TRIDES FOR INDUSTRIAL APPLICATIONS. Victor Bellido-González, Benoit Daniel, Sarah Powell GENCOA, Physics Road, Liverpool L24 9HP (UK)		WS-18-TuM-INV.5 LEAK DETECTION: CALIBRATIONS AND REFERENCE FLOWS ARE REQUIRED IN EVERY TYPE OF APPLICATIONS: PRACTICAL EXAMPLES. A.Calcatelli, Istituto Nazionale di Ricerca Metrologica, I.N.RI.M., Turin, Italy.M.Bergoglio, Istituto Nazionale di Ricerca Metrologica, I.N.RI.M., Turin, Italy .D. Mari, Istituto Nazionale di Ricerca Metrologica I.N.RI.M., Turin, Italy		
		JS1-TuM-INV.2 SURFACE TREATMENTS FOR INDUSTRIAL GLASSES J.M. Marco. Responsable de I+D. Ariño Duglass S.A. La Puebla de Alfinden, Zaragoza. Spain				
11:00		COFFEE BREAK				
		JS1-TuM-INV.3 MULTILAYER COATINGS FOR OPTICAL AND ENERGETIC CONTROL IN GLASSES. F. Villuendas. Departamento de Física Aplicada. Universidad de Zaragoza. 50009, Zaragoza. Spain		WS-18-TuM-OR.6 LEAK CALIBRATION BY COMPARISON WITH REFERENCE STANDARD LEAKS. J. M. Hidalgo* and J. L. de Segovia** *Telstar Industrial S. L., José Tapio-las 120, Tarrasa, Spain. ** Instituto de Ciencia de Materiales, CSIC, Cantoblanco, 28249 Madrid, Spain.		
		JS1-TuM.INV.4 FUNCTIONAL AND DECORATIVE REFLECTING LAYER FOR AUTOMOTIVE LIGHTING IN VALEO. J. M. Trigo, R. Acuña, A. Lara and D. Teba, Valeo Iluminación Martos, Calle Linares 15, 23600 Martos, Jaén. Spain.		WS-18-TuM-OR.7 HEALIUM LEAKS TRACEBILITY AT CZECH METROLOGY INSTITUTE (CMI). Dominik Prazak. Czech Metrology Institute, Okruzni 31, 638 00, Brno, Czech Republic. Jiri Tesar. Czech Metrology Institute, Okruzni 31, 638 00, Brno, Czech Republic. Petr Repa. Charles University Prague, V Holesovickach 2, 180 00, Prague 8, Czech Republic. Ladislav Peksa. Charles University Prague, V Holesovickach 2, 180 00, Prague 8, Czech Republic. Tomas Gronych. Charles University Prague, V Holesovickach 2, 180 00, Prague 8, Czech Republic. Martin Vicar. Czech Metrology Institute, Okruzni 31, 638 00, Brno, Czech Republi		
12:00		JS1-TuM-INV.5 TAILORING THE OPTICAL PROPERTIES OF THIN FILMS DEPOSITED BY PLASMA CVD. A. Barranco, A. Borrás, F. Gracia, A.R. González-Elipe. Instituto de Ciencia de Materiales de Sevilla (CSIC-Universidad de Sevilla), c/América Vespucio s/n 41092 Sevilla Spain		WS-18-TuM-OR.8 CURRENT TRENDS IN LEAK TESTING TECHNOLOGY A. P. Fonseca, H. P. Marques, A. M. C. Moutinho and O. M. N. D. Teodoro. METROVAC — Laboratório de Tecnologia e Metrologia de Vácuo. CEFITEC, Departamento de Física, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, 2829-516 CAPARICA, Portugal		
		JS1-TuM-INV.6 SMART OPTICAL WINDOWS OF VARIABLE TRANSPARENCY. E. Matveeva, Universidad Politécnica de Valencia (UPV), Centro Materiales y Tecnologías de Micro Fabricación (MTM), Unidad Asociada al Instituto de Ciencias de Materiales de Madrid, Cami de Vera s/n, E-46022 Valencia, España		WS-18-TuM-OR.9 CALIBRATION OF HELIUM LEAKS: REFERENCE METHOD AND DISSEMINATION. RANGE FROM 4.10 ⁻¹⁴ MOLE.S ⁻¹ (10 ⁻¹⁰ PA.M³.S ⁻¹) TO 4.10 ⁻⁶ MOLE.S ⁻¹ (10 ⁻² PA.M³.S ⁻¹). Pierre OTAL, Frédéric BOINEAU, Jean-Claude LEGRAS. Laboratoire National de Métrologie et d'Essais (LNE)		
		JS1-TuM-INV.7 COATINGS FOR OPHTHALMIC LENSES. T. Vilajuana, Departamento de I+D+I INDO, Sta. Eulàlia, 181 08902 L'Hospitalet de Llobregat, Barcelona. Spain		WS-18-TuM-OR.10 A NEW PROCEDURE AND DEVICE FOR THE STUDY OF HYDRIDING PROCESSES FROM THE INNER SURFACE OF NUCLEAR FUEL CLADDINGS. M. Díaz*, J. S. Moya*, J. L. Sacedón** * Instituto de Ciencia de Materiales de Madrid (CSIC), Cantoblanco, Madrid-28049, Spain. B. Remartínez ^b , S. Pérez ^b . ^b TEMAT Iberdrola, Pº Virgen del Puerto, Madrid-28005, Spain		
13:00		JS1-TuM-INV.8 ADDED VALUE NANOSTRUCTURED COATINGS WITH TAILORED OPTICAL BEHAVIOUR. C. N. Afonso. Instituto de Optica, CSIC, Serrano 121, 28006 Madrid, Spain.				

	ROOM C Session: Chairmen: A. Lousa J. F. Trigo	ETCHC: HARD COATINGS II Unioversidad de Barcelona. ES CIEMAT. ES	ROOM D 7th IUVSTA COURSE
16:00		ETCHC--MoA-INV.2 NOSTRUCTURED PVD COATINGS ON THE VERGE OF INDUSTRIAL APPLICATIONS. Rafael J. Rodríguez, José-Antonio García, Gonzálo García and Rosario Martínez. AIN. Centro de Ingeniería Avanzada de Superficies. 31191 Cordovilla — Pamplona, SPAIN.	TUTORIAL I: PHOTOEMISSION AND ASSOCIATED TECHNIQUES LECTURER: Guy Le Lay CRMN-CNRS Campus de Luminy Case 913 F-13288 Marseille Cedex 9 France
17:00		COFFEE BREAK	
		ETCHC-MoA-OR.9 CHANGES DETECTED IN ECR-CVD AMORPHOUSAND NI-TROGENATED AMORPHOUS CARBON FILMS BY INCREASING PLASMA ION ION ENERGY. J.G. Buijnsters, M. Camero, L. Vázquez, C. Gómez-Aleixandre, J.M. Albella, Instituto Ciencia de Materiales, CSIC, Sor Juana Inés de la Cruz 3, 28049 Madrid, Spain	TUTORIAL I: PHOTOEMISSION AND ASSOCIATED TECHNIQUES (Continues) LECTURER: Guy Le Lay CRMN-CNRS Campus de Luminy Case 913 F-13288 Marseille Cedex 9 France
		ETCHC-MOA-OR.104 MODIFICATIONS OF TRIBOLOGICAL BEHAVIOUR OF STAINLESS STEELS BY DUPLEX TREATMENTS. R. J. Rodriguez, J.A. Garcia, R. martinez, G. G. Fuentes. AIN. Centro de Ingeniería Avanzada de Superficies. 31191 Cordovilla, Pamplona, Spain	
18:00		ETCHC-MoA-INV.3 THERMAL BEHAVIOUR OF W-SI-N HARD COATINGS IN PROTECTIVE AND OXIDATION ENVIROMENTS. A. Cavaleiro, ICEMS-Faculdade de Ciências e Tecnologia da Universidade de Coimbra, Dep. Eng. Mecânica, Rua Luís Reis Santos, 3030-788 Coimbra, Portugal	

JUNE 26		MONDAY AFTERNOON	
	ROOM A Session: RIVA-TF THIN FILMS II Chairmen: J. L. Sacedón ICMM-CSIC. ES A. Cavaleiro Universidade de Coimbra. PT	ROOM B Session: WS-18 VACUUM MEASUREMENT II Chairmen: A. Calcatelli Instituti di Metrology. IT P. López Telstar. ES	
16:00	RIVA-TF-MoA-OR.9 INFLUENCE OF PRESSURE ON THE STRUCTURAL MECHANICAL AND DECORATIVE PROPERTIES OF TIN THIN FILMS DEPOSITED BY CATHODIC ARC EVAPORATION. A. Lousa, J. Esteve. Departamento de Física Aplicada y Óptica, Universidad de Barcelona, Avda. Diagonal 647, E-08028 Barcelona, Catalunya, Spain. J.P. Mejia, A. Devia. Laboratorio de Física del Plasma, Universidad Nacional de Colombia Sede Manizales, Campus La Nubia, Manizales, Colombia	WS-18-MoA-INV.3 CLEANING PROCESSES AND QUALITY CONTROL FOR VACUUM. R J Reid, ASTeC, CCLRC Daresbury Laboratory, Warrington WA4 4AD, UK	
	RIVA-TF-MoA-OR.10 THE INFLUENCE OF MAGNETIC CONFINEMENT IN DIRECT ABNORMAL GLOW DISCHARGES. Y. Nunes, A. Wemans, P. R. Gordo and M. J. P. Maneira. Cefitec - Department of Physics, Faculty of Sciences and Technology, New University of Lisbon, P-2829-516, Caparica, PORTUGAL		
	RIVA-TF-MoA-OR.11 ADSORPTION PROPERTIES, MICROSTRUCTURE AND OPTICAL BEHAVIOUR OF TiO₂ THIN FILMS PREPARED BY PECVD. A.Borrás, A. Barranco, J. Cotrino, A.R. González-Elípe. Instituto de Ciencia de Materiales de Sevilla (CSIC-Univ. Sevilla). Avda. América Vespucio s/n. 41092 Sevilla (Spain)		
17:00	COFFEE BREAK		
	RIVA-TF-MOA-OR12 STRUCTURAL, ELECTICAL and OPTICAL PROPERTIES OF INDIUM-TIN-OXIDE THIN FILMS prepared by PULSED LASER DEPOSITION. A. Khodorov, M. Piechowiak* and M.J.M.. Gomes. Physics Center, University of Minho, 4710-057 Braga, Portugal. *Department of Material Science, University of Silesia, 41-200 Cosnowiec, Poland	WS-18-MoA-INV.4 CALIBRATION OF PRESSURE SENSORS IN AN INDUSTRIAL ENVIRONMENT. M. Wüest, INFICON Ltd., Alte Landstrasse 6, LI-9496 Balzers, Liechtenstein	
	RIVA-TF-MOA-OR.13 BREAKDOWN VOLTAGE IN MAGNETRON DC GLOW DISCHARGES. THE INFLUENCE OF THE MAGNETIC FIELD. Y. Nunes, A. Wemans, P. R. Gordo and M. J. P. Maneira. Cefitec - Department of Physics, Faculty of Sciences and Technology, New University of Lisbon, P-2829-516, Caparica, PORTUGAL.		
18:00	RIVA-TF-MoA-OR.14 STUDY OF THE EFFECT OF SILICON EXCESS AND ARTIFICIAL AGEING ON THE MICROSTRUCTURAL STABILITY OF Al-Mg-Si ALLOYS. Y. Aouabdia*, Boubertakh ABDEL HAMID*, Hamamda SMAÏL*. Laboratoire des Propriétés Thermodynamiques et des Traitements de Surface des Matériaux. Faculté des Sciences, Université Mentouri-Constantine Route Ain El-Bey, 25000 Constantine, Algérie		
	RIVA-TF-MoA-OR.15 OXIDE THIN FILM COATINGS BY SPRAY PYROLYSIS ONTO STEEL COILS. R. López Ibáñez. Departamento de Física Aplicada I, Facultad de Ciencias, Universidad de Málaga, E-29071 Málaga, Spain. F. Martín. Departamento de Ingeniería Química, Facultad de Ciencias, Universidad de Málaga, E-29071 Málaga, Spain. J.R. Ramos-Barrado. Departamento de Física Aplicada I, Facultad de Ciencias, Universidad de Málaga, E-29071 Málaga, Spain. D. Leinen. Departamento de Física Aplicada I. Facultad de Ciencias. Universidad de Málaga. E-29071 Málaga. Spain.	WS-18-MoA-OR.4 LONG TERM SHIFT IN CAPACITANCE GAUGES: CONTRIBUTION TO THE TOTAL UNCERTAINTY. J. M. Hidalgo* and J. L. de Segovia** Telstar Industrial S.L. José Tapiolas 120, 08226 Terrassa Spain.** Instituto de Ciencia de Materiales,CSIC,Cantoblanco,28240Madrid,Spain	
	RIVA-TF-MoA-OR.16 DUAL DC MAGNETRON CATHODE CO DEPOSITION OF (Al, Ti) AND [(Al, Ti) N] THIN FILMS WITH CONTROLLED DEPTH COMPOSITION. Y. Nunes, A. Wemans, H. P. Marques, Q. Ferreira, O. M. N. Todoro and M. J. P. Maneira. Cefitec - Department of Physics, Faculty of Sciences and Technology, New University of Lisbon, P-2829-516, Caparica, PORTUGAL	WS-18-MoA-OR 5 DYNAMIC EXPANSION SYSTEM AT CEM. C.Matilla; N.Medina; S.Ruiz. Spanish Centre of Metrology (CEM).	

JUNE 26			MONDAY MORNING		
08:30 MAIN HALL	OPENING CEREMONY Excm. Magfco. Rector Prof. O. Teodoro Prof. J. Colligon Dr. R. Reid		University of Salamanca Chairmen Riva-6-SOPORVAC Charman EVC Series IUVSTA-General Secretary	Prof. J. L. de Segovia Prof. A. Calvo Prof. J. M Albella Prof.	Chairmen Salamanca 2006 Chairwoman Local Committee ASEVA President Dean, Faculty of Sciences
09:00 MAIN HALL	MoM-PI.1	QUALITY VACUUM MEASUREMENTS FOR PROCESS APPLICATIONS. Charles R. Tilford, Independent Consultant, Gaithersburg, MD USA, Chairpersons J. L. de Segovia. ASEVA-ICMM-CSIC.ES O. Teodoro University Nova do Lisboa			
	ROOM C	Session: ETCHC HARD COATINGS I	ROOM D 7th IUVSTA COURSE		
	Chairmen:	J. M. Albella ICMM.CSIC.ES C. Tavares Universidade do Minho. PT			
10:00		ETCHC--MoM-OR.1 ROOM TEMPERATURE PL CHARACTERIZATION OF MICRO- AND NANOCRYSTALLINE DIAMOND GROWN BY MPCVD FROM AR/H ₂ /CH ₄ MIXTURES M.A. Neto. CICECO Dept. of Ceramics & Glass Engineering, University of Aveiro, Portugal. A.J.S. Fernandes. Dept. of Physics, University of Aveiro, Portugal. R.F. Silva. CICECO- Dept. of Ceramics & Glass Engineering, University of Aveiro, Portugal. F.M. Costa. Dept. of Physics, University of Aveiro, Portugal	INTERACTION OF X-RAY AND MATTER LECTURER: M. C. ASENSIO Instituto de Ciencia de Materiales de Madrid CSIC 28049 MADRID		
		ETCHC-MoM-OR.2 COMPUTER DESIGN OF OPTICAL COATINGS IN SYSTEMS WITH CONTINUOUSLY VARYING REFRACTIVE INDEX. J.F. Trigo. Departamento de Energía, CIEMAT, Avda. Complutense 22, E-28040 Madrid, Spain. I. Preda, S. Palacín, A. Gutiérrez and L. Soriano. Departamento de Física Aplicada C-XII, Universidad Autónoma de Madrid, Cantoblanco E-28049 Madrid, Spain			
		ETCHC-MoM-OR.3 STUDY OF HYDROGEN AND OXYGEN UPTAKE IN SMART OPTICAL WINDOWS BASED ON YPd AND MgNiPd THIN FILMS BY GDOES. E. Matveeva, E.Rayon. Centro MTM, Universidad Politécnica de Valencia, Cami de Vera s/n, E-46022 Valencia Spain. R. Escobar Galindo, J.M. Albella. Departamento Física en Ingeniería de Superficies, Instituto Ciencia de Materiales, Cantoblanco, E-28049 Madrid, Spain.			
11:00		COFFEE BREAK			
		ETCHC-MoM.-OR.4 TRIBO-MECHANICAL PROPERTIES OF CrAIN COATINGS DOPED WITH YTTRIUM AND ZIRCONIUM. M. Brizuela, D. González, A. García-Luis, P. Corengia. Fundación INASMET-Tecnalia, Paseo de Mikeletegi 2, 20009 San Sebastián, Spain	PHOTOEMISSION AND ASSOCIATED TECHNIQUES LECTURER: GUY LeLay CRM-CNRS Campus de Luminy Case 913 F-13288 Marseille Cedex 9 France		
		ETCHC-MoM-OR.5 OES TIME-RESOLVED CHARACTERIZATION OF THE DEPOSITION OF MULTILAYERED COATINGS. J. Romero, A. Lousa. Departamento de Física Aplicada y Óptica, Universidad de Barcelona, Avda. Diagonal 647, E-08028 Barcelona, Catalunya, Spain.			
12:00		ETCHC-MoM-INV.1 NANOCOMPOSITE HARD COATINGS AS INTERFACE DOMINATED MATERIALS. Jörg Patscheider, EMPA, Materials Science and Technology. Überlandstr. 129. CH-8600 Dübendorf, Switzerland.			
13:00		ETCHC-MoM-OR.6 SPUTTERING OF NITRIDES BY LOW-ENERGY IONS OF DIFFERENT MASSES . S.S. Elovikov, A.S. Mosunov, J. C. Colligon * Yu.A.Ryzhov, I.I.Shkarban, V.E.Yurasova, E.Yu.Zykova. Physics Faculty, Moscow State University, Moscow, 119899, Russia. * Manchester Metropolitan University. John Dalton Extension, Manchester M1 5GD, England, UK			
		ETCHC-MoM-OR.7 TUNGSTEN OXIDE WITH DIFERENT OXYGEN CON-TENT: SLID-ING PROPERTIES. T. Polcar, N.M.G. Parreira and A. Cavaleiro ** ICEMS — Grupo de Materiais e Engenharia de Superfícies, Faculdade de Ciências e Tecnologia da Universidade de Coimbra — Pólo II, 3030-201 Coimbra, Portugal.			
		ETCHC-MoM-OR.8 BORONIMPLANTATION EFFECTS IN CDS THIN FILMS GROWN BY CHEMICAL SYNTHESIS. K. L. Narayanan, M. Yamaguchi, Toyota Technological Institute, 2-12 Hisakata, Tempaku, Nagoya-468 8511, Japan. R. Lozada-Morales ¹ , O. Portillo-Moreno ² , Benemérita Universidad Autónoma de Puebla. ¹ Departamento de Optoelectrónica, Facultad de Ciencias Físico-Matemáticas. ² Facultad de Ciencias Químicas. Puebla, México.O. Zelaya-Angel. Departamento de Física. Centro de Investigación y de Estudios Avanzados del IPN. P.O.Box 14-740, México 07360 D.F.			

JUNE 26				MONDAY MORNING		
08:30 MAIN HALL	OPENING CEREMONY	Prof. Enrique Battaner Prof. O. Teodoro Prof. J. Colligon Dr. R. Reid	Rector University of Salamanca Chairmen Riva-6-SOPORVAC Charman EVC Series IUVSTA-General Secretary	Prof. J. L. de Segovia Prof. A. Calvo Prof. J. M Albella	Chairmen Salamanca 2006 Chairwoman Local Committee President ASEVA	
09:00 MAIN HALL	MoM-PI.1	QUALITY VACUUM MEASUREMENTS FOR PROCESS APPLICATIONS. Charles R. Tilford, Independent Consultant, Gaithersburg, MD USA, Chairpersons J. L. de Segovia. ASEVA-ICMM-CSIC.ES O. Teodoro SOPORVAC. Universidade Nova do Lisboa.PT				
	ROOM A	Session: Chairmen: A. Alberdi V. Teixeira	RIVA-TF THIN FILMS I ICMM.CSIC.ES Universidde do MINHO .PT	ROOM B	Session: Chairmen F. Tabarés A.M.C. Moutinho	WS-18 VACUUM MEASUREMENT I CIEMAT. ES Universidade Nova de Lisboa. PT
10:00		RIVA-TF-MoM-INV.1 THIN FILM STACKS FOR SPINTRONIC DEVICES: PREPARATION AND CHARACTERIZATION, P.P.Freitas, S.Freitas and R.Ferreira. INESC MN, Lisbon, Portugal and Physics Department, Instituto Superior Tecnico, Lisbon, Portugal		WS-18-MoM.INV.1 STANDARS AND CALIBRATIONS IN VACUUM TECHNOLOGY. Karl Jousten, Physikalisch-Technische Bundesanstalt, Abbestr. 2-12, 10587 Berlin, Germany		
11:00		COFFEE BREAK				
		RIVA-TF-MoM-OR.1 DETERMINATION OF THE HYDROGEN CONTENT IN DIAMOND-LIKE CARBON AND POLYMERIC THIN FILMS BY REFLECTION ELECTRON ENERGY LOSS SPECTROSCOPY. J. Rico, F. Yubero, J.P. Espinós, J. Cotrino, and A.R. González-Elipe. IC MSE (CSIC-USE) Américo Vespucio s/n, E-41092 Sevilla, Spain D. Garg. Air Products and Chemicals, Inc. 7201 Hamilton Boulevard, Allentown, PA 18195-1501, USA		WS-18-MoM-OR.1 MASS SPECTROMETRIC ANALYSIS OF COMPLEX GAS MIXTURES BY USING A CRYOGENIC TRAP: APPLICATION TO H2:CH4:N2 PLASMAS. Jose A. Ferreira and Francisco L. Tabarés. Laboratorio Nacional de Fusión por Confinamiento Magnético, CIEMAT, Avda Complutense 22, Madrid		
		RIVA-TF-MoM-OR.2 STRAIN ANALYSIS OF PHOTOCATALYTIC TiO2 THIN FILMS ON POLYMER SUBSTRATES. C.J. Tavares ¹ , S.M. Marques ¹ , V. Teixeira ¹ , J.O. Carneiro ¹ , A.J. Fernandes ² , E. Alves ³ , A.R. Ramos ³ . ¹ Departamento de Física, Universidade do Minho, 4800-058 Guimarães, Portugal. ² Departamento de Física, Universidade de Aveiro, 3810-193 Aveiro, Portugal. ³ Instituto Tecnológico e Nuclear, EN 10, 2686-953 Sacavém, Portugal		WS-18-MoM-OR.2 NUMERICAL MODELING OF THE ION BEAM TRANSMISSION EFFICIENCY FOR DESIGN OF THE VACUUM SYSTEM OF THE DC-60 CYCLOTRON. A.V. Tikhomirov, G.G. Gulbekian, B.N. Gikal. Flerov Laboratory of Nuclear Reactions, Joint Institute for Nuclear Research, Joliot-Curie 6, 141980 Dubna, Moscow region, Russia.		
		RIV-TF-MoM-OR.3 EPITAXIAL MATCHING OF SMALL METALLIC NANOCUSTERS IN LARGE-MISFIT SYSTEMS. J.C. Jiménez-Sáez. Departamento de Física y Química Aplicadas a la Técnica Aeronáutica, E.U.I.T. Aeronáutica, Universidad Politécnica de Madrid (UPM), E-28040 Madrid, Spain. A.M.C. Pérez-Martín and J.J. Jiménez-Rodríguez. Departamento de Electricidad y Electrónica, Facultad de Ciencias Físicas, Universidad Complutense, E-28040 Madrid, Spain.				
12:00		RIVA-TF-MoM-OR.4 Ta2O5 THIN FILMS PREPARED BY EVAPORATION AND IBAD METHODS: CHARACTERIZATION AND WETTING BEHAVIOUR UNDER UV IRRADIATION. V. Rico, J.P. Espinós, F. Yubero, F. Frutos*, A.R. González-Elipe. Instituto de Ciencia de Materiales de Sevilla (CSIC-Univ. Sevilla). Avda. Américo Vespucio s/n. 41092 Sevilla (Spain). *Dpto. Física Aplicada I, ETS Ingeniería Informática. Avda. Reina Mercedes s/n. 41012 Sevilla (Spain)		WS-18-MoM-INV.2 VACUUM STANDARDS AT CEM. C. Matilla. Spanish Centre of Metrology		
		RIVA-TF.MoM-OR.5 LOW TEMPERATURE DEPOSITION OF TiB2 ON X40 CRMOV 5 T STEEL SUBSTRATE BY DC MAGNETRON SPUTTERING. A. Duarte ^{1,2*} , B. Coelho ² , M. Vila ² , A.J.S. Fernandes ³ , F. Oliveira ² , F.M. Costa ³ R.F. Silva ² . 1 - Laboratório - F. Ramada, Aços e Industrias, S.A., Apartado 10, 3880-909 Ovar, Portugal.- CICECO - Dept. of Ceramics & Glass Engineering, University of Aveiro, 3810-193 Aveiro- Portugal ² - Dept. of Physics, University of Aveiro, 3810-193 Aveiro-Portugal				
		RIVA-TF-MoM-OR.6 A MINIMALIST SURFACE DECOMPOSITION METHOD APPLIED TO STUDY THE SURFACE CONTROL OF THE Au POLYCRYSTALLINE COLUMNAR FILM GROWTH. E. Rodríguez-Cañas *, and J. L. Sacedón. Instituto de Ciencia de Materiales de Madrid (CSIC), 28049 Cantoblanco, Madrid, Spain. J. A. Aznárez. Instituto de Física Aplicada (CSIC), Serrano 144, 28006 Madrid, Spain. A. I. Oliva. Cinvestav del IPN Unidad Mérida, Dpto. de Física Aplicada, AP 73- Cordemex 97310 Mérida, Yucatán, Mexico				
13:00		RIVA-TF-MoM-OR.7 INFLUENCE OF THE YTTRIUM CONTENT ON THE MECHANICAL PROPERTIES OF Y2O3-ZrO2 THIN FILMS PREPARED BY EB – PVD. I. M. Ochando. Instituto de Ciencia de Materiales de Madrid, Consejo Superior de Investigaciones Científicas. Cantoblanco, 28049 – Madrid, Spain. D. Cáceres. Departamento de Física, Universidad Carlos III de Madrid, E-28911 Leganés, Spain. F. J. García-López. Centro Nacional de Aceleradores, Parque Tecnológico Cartuja'93, 41092 – Sevilla, Spain. R. Escobar-Galindo, R. J. Jiménez-Rioboó and C. Prieto. Instituto de Ciencia de Materiales de Madrid. Consejo Superior de Investiaaciones Científicas. Cantoblanco. 28049 – Madrid. Spain.		WS-18-MoM-OR.3 NEUTRAL PRESSURE MEASUREMENTS IN TJ-II PLASMAS. F.L Tabarés, D. Tafalla and J.A. Ferreira. Laboratorio Nacional de Fusión por Confinamiento Magnético, CIEMAT, Avda Complutense 22, Madrid		
		RIVA-TF-MoM-OR.8 STUDY OF THE DC-SPUTTERED Mo ON POLYMER SUBSTRATE FOR FLEXIBLE CIGS SOLAR CELLS M. Andrés and M.T. Gutiérrez. Dep. of Energy, CIEMAT. Avda. Complutense, 22. 28040 Madrid SPAIN				

SCIENTIFIC PROGRAMME

PRESENTATIONS:

PLENARY LECTURES: 55 min including 5 min discussion.
Note that there is 5 min to move attendees to parallel sessions

INVITED LECTURES

RIVA-6, ETCHC-4, WS-18 AND JS2

55 min including 5 min discussion

WS-20 30 min including 5 min discussion (except INV.3 and INV.4 that will be 25 min including 5 min discussion to fix the programme)

ORAL PRESENTATIONS

RIVA-TF, ETCHC, JS2, RIVA-SS

20 min including 5 min discussion

WS-18 30 min including 5 min discussion

The Programme is divided in hours and each hour in slots of 10 minutes. Examples:

RIVA-TF-MoM-OR.1 starts at 11:20 and ends at 11:40

WS-18-MoM-OR.2 starts at 11:50 and ends at 12:20

POSTERS PRESENTATION

Maximum poster size is 100 cm high and 90 cm wide.

Poster can be displayed any time from Monday through Wednesday. Tuesday afternoon all poster should be installed. Authors are requested to be present in their poster on Wednesday 16:00 to 17:15 hours and removed just at the end of the session.

Poster can be fixed only with TAPE

REGISTRATION

Registration will be open SUNDAY 25 from 17:00 through 20:00 hours at Faculty of Physics building

IVA-6 ETCHC-4 WS-18 WS-20
7TH IUVSTA COURSE

PROGRAMME Part 2:
Scientific Programme

SALAMANCA-2006

