

Humboldt Kolleg

University Research-Industry: partnering opportunities

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Organized by



Maghreb-Alexander von Humboldt Alumni Association

in collaboration with



German-Moroccan Competency Network

Royaume du Maroc
Ministère de l'Industrie,
du Commerce et des
Nouvelles Technologies



المملكة المغربية
وزارة الصناعة
والتجارة
والتكنولوجيات الحديثة

Ministry of Industry, Trade and New Technologies



Research Team Mathematics-Computer Science and Linguistics
(Ecole Nationale de l'Industrie Minérale)

**Venue : Ecole Nationale de l'Industrie Minérale, Ave. Hadj Ahmed Cherkaoui,
Agdal, Rabat**

MOROCCO

JUNE 21-23, 2010

DAY 1/ MONDAY, June 21

08:00-08:45: Registration

08:45-10:30: Opening ceremony and Keynote Speech

- Abdelhadi Soudi, Humboldt Ambassador Scientist and President of the Maghreb Alexander von Humboldt Alumni Association, Ecole Nationale de l'Industrie Minérale

- Omar Debbaj, Director of the Ecole Nationale de l'Industrie Minérale

- Mr Juergen Woelke, Embassy of the Federal Republic of Germany

- His Excellency Minister of Industry, Trade and New Technologies

- His Excellency Minister of Education, Higher Education and Scientific Research

- His Excellency Minister of Energy, Mining, Water and Environment

- His Excellency Minister for Moroccan Communities Abroad

- Farissi Serghini, President of Sidi Mohammed Ben Abdellah University, Fès.

- Hassan Dihazi, The German-Moroccan Competency Network, Germany

- Said Belcadi, Director of the National Center for Scientific and Technical Research

- **Keynote Speech: The Importance of International Cooperation: Strategies of Research Planning at the University of Göttingen**, Paul Winkler, Director of the Research Development Section of the Georg-August-Universität Göttingen, Germany.

10:30-10:45: Coffee Break

10:45-12:45: Plenary Session I: Research-Industry linkages: strategies and some best practice cases

Session Chair: Dihazi Hassan

- **Research between fundamentals and application to industrial challenges: A German perspective from the DLR Institute of Combustion Technology**, Klaus Peter Geigle, German Aerospace Center) Deutsches Zentrum fuer Luft- und Raumfahrt (DLR), Germany.
- **Synchrotron radiation for University and Industrial research**, Bendounan Azzedine, Synchrotron SOLEIL, L'Orme des Merisiers, France
- **University Industrial Parks: A new Trend**, Ashraf H. Abadi Faculty of Pharmacy and Biotechnology, The German University in Cairo-GUC, New Cairo City, Main Entrance- Al-Tagamoa Al-Khames, Egypt.
- **Learning based objectives and Bologna process guidelines as a means to enhance academy-entreprise partnership**, Chouaib Benqlilou (Ecole Nationale de l'Industrie Minérale, Rabat, Morocco), M. Graells (Escola Universitària d'Enginyeria Tècnica Industrial de Barcelona, Barcelona, Spain).

12:45-14:30: Lunch

14:30-16:30: Plenary Session II: Valorisation and exploitation of Scientific Research

Session Chair: Hassan Dihazi

- **Réseau Maroc Incubation et Essaimage, Réalisations et perspectives**, Dinia Salma, National Center for Scientific and Technical Research (CNRST), Morocco.
- **LA Valorisation économique des Résultats de la Recherche: Une nouvelle mission Pour l'Université Marocaine. Etat des Lieux, Bilan des activités de valorisation et perspectives de développement à l'Université CADI AYYAD (Marrakech)**, M'barek BENCHANAA, Incubateur Universitaire de Marrakech «INMA» et des Pôles d'Excellences de l'Université Cadi Ayyad Université Cadi Ayyad, Faculty of Sciences Semlalia Marrakech, Morocco.
- **Centre d'Incubation et d'Accueil d'Entreprises Innovantes de l'ENIM : Créativité et Innovation**, Abdelkader Maatoug and Said Kitane (Ecole Nationale de l'Industrie Minérale), Morocco.

16:30-16:45 Coffee Break

16:45-18:15

- **Relation Université/Entreprise: Cas de filière sciences agroalimentaires, Faculty of Sciences, UMP, Oujda**, Elamrani A, Serghini Caid H., Abid M., Mihamou A. et Hakkou A., Faculté des sciences, Biologie, Université Mohamed premier, Oujda, Morocco.
- **Les incubateurs d'entreprises innovantes: un réseau entrepreneurial reconfiguré ?** Naimi Rafik, Med I University, Oujda, Morocco.

DAY 2 / TUESDAY, June 22: PARALLEL SESSIONS

Session I: Exact Sciences

Session chairs: Bouyakhf El Houssine and El Hassan Zerouali

8:30-10:30

- **Unlocking the secrets of space-time**, Ali Chamseddine, American University of Beirut, Beirut, Lebanon.
- **Rearrangement inequalities and some applications in nonlinear optics**, Hichem hajaiej, Institut Préparatoire aux Etudes d'Ingénieur de Tunis, Tunisia.
- **Investigation of the conformational space of disaccharides by quantum mechanics methods**, Majda Sekkal-Rahal, Djillali Liabes de Sidi-Bel-Abbes University, Algeria.
- **Mathematical modelling of physical phenomena in human bio-mechanics**, Khalid Addi, University of La Réunion, France.

10:30-10:45 Coffee Break

10 :45-12:45

- **Optimality conditions for non-convex optimization problems-Application to bilevel Optimization problems**, Nazih Gadhi, Universite Sidi Mohamed Ben Abdellah, Fez, Morocco.
- **Opérateurs de composition sur les espaces de fonctions analytiques**, Omar El-Fallah, Faculty of Sciences, Rabat, Morocco.
- **Dynamique des opérateurs linéaires**, El Hassan Zerouali, Faculty of Sciences, Rabat, Morocco.
- **Control of Dynamical Population equations with Diffusion**, Lahcen Maniar, Caddi Ayad University, Marrakech, Morocco.

12:45-14:15: Lunch

14-15:16:30

- **Cloud Computing: opportunity for all**, Abdelali Zahi, Risklab, München, Germany.
- **Modeling and Capacity of Wireless Network Systems**, Baslam Mohammed, El Houssine Bouyakhf, Abdellatif Kobane, Khalil Ibrahimi, Essaïd Sabir, Raiss Mohammed, Sihame Elhammani, Mohammed Elkamili , Faculty of Sciences, Med V University, Rabat, Morocco
- **Implementation of TCP and FTP in the WiMAX module of simulX simulator**, Mohamed BASLAM, Tania JIMENEZ, Rachid ELAZOUZI, El Houssine Bouyakhf, Faculty of Sciences, Med V University, Rabat, Morocco.
- **The cutting edge of growing GPS business in Morocco and North Africa**, Mohamed S .Kayyali, CTO-UrbaSoft.
- **Major TSI Team Research Activities Applied to Medicine and Industry**, Fakhita Regragui , El Houssine Bouyakhf, Majid Himmi, Abra Oum El Kheir, Wassima Aït Farès, Fatima Eddaoudi, Abdelhak Mahmoudi, Younès Raoui, Younès Kabbadj and Nadia Mountaj, Faculty of Sciences, Med V University, Rabat, Morocco.

16:30-16:45 Coffee Break

16:45-18:30

- **Arabic Search Engine**, Jamal Harber Tandina, Fadoua Mahzoume, Khalil Honsali (Faculty of sciences, Med V University, Morocco).
- **Robustness of acoustic, laryngographic and aerodynamic features of implosives in Potou languages**, Firmin Ahoua University of Cocody, Ivory Coast.
- **Information Technology Industry: case of natural language processing systems**, Abdelhadi Soudi, ENIM, Rabat, Morocco.
- **Encoding techniques of video for the web**, Thami Amine Ouahbi, Veille Technologique, SNRT, Rabat, Morocco.

18:30-19:00: Plenary session: sessions' moderators present an overview of their session's contributions

Session II: NATURAL Sciences

Session Chairs: Hartmut Seliger and Ibrahim Zeid

8:30-10:30

- **Exploration of actinobacteria from Moroccan ecosystems for their biomedical and agricultural uses**, Mustapha Barakate and Yedir ouhdouch, Caddi Ayad University, Marrakech, Morocco.
- **New Organometallic and Phosphorus Compounds of Industrial and Pharmacological Applications**, Fouad Soliman, National Research Center, Dokki, Cairo, Egypt.
- **Models and Model Systems for Studying Stress Tolerance of Plants: from Experimental Design to Biotechnological Perspectives**, Arnd G. Heyer, Institute of Biology, University of Stuttgart, Germany.
- **Synthesis of heterocyclic compounds of anticipated biological activity**, Fathy M. Abdelrazek Chemistry Department, Faculty of Science, Cairo University, Giza, Egypt.
- **Elaboration, caractérisation, et activité biologique de nouveaux pesticides à base de pyrazole pour une meilleure gestion de l'environnement**, Touriya Zair, Lhousain Sabri, Mohammed Alaoui EL Belghiti (Mohammed V University- Agdal, Rabat) and Said Kitane (Ecole Nationale de l'Industrie Minérale, Rabat, Morocco).

10:30-10:45: Coffee Break

10:45-12:45

- **Elaboration, caractérisation, et activité biologique de nouveaux pesticides à base de pyrazole pour une meilleure gestion de l'environnement**, Touriya Zair, Lhousain Sabri, Mohammed Alaoui EL Belghiti (Mohammed V University- Agdal, Rabat) and Said Kitane (Ecole Nationale de l'Industrie Minérale, Rabat, Morocco).
- **Reactivity Parameters for Rationalizing Iminium-Catalyzed Reactions**, Sami Lakhdar, Ludwig-Maximilians-Universität München, Germany.
- **Multicyclic Polymers by a² + b⁴ Polycondensation**, Hans R. Kricheldorf, Institute of Technical and Macromolecular Chemistry, University of Hamburg, Germany.
- **Metals complexes initiator for the ring-opening polymerization of Lactide**, M. LAHCINI,¹ R. KRICHELDORF², T. REPO,³ M. RAIHANE,¹ H. QAYOUH,¹ H. KADDAMI.¹ (¹Laboratoire de Chimie Bioorganique et Macromoléculaire, Faculté des Sciences et Techniques Marrakech, Marrakech, Maroc), (²Institut für Technische und Makromolekulare Chemie der Universität Hamburg, Bundesstr. 45, D-20146 Hamburg, Germany).(³Laboratory of Inorganic Chemistry, Department of Chemistry, University of Helsinki, Finland.)
- **Elaboration and characterization of several biomaterials based on sugar diols**, S. Chatti (Institut National de Recherche et d'Analyse Physico-chimique (INRAP, Tunisia) and H.R.Kricheldorf Institut für Technische und Makromolekulare Chemie der Universität, Hamburg, Germany.

12:45-14:15: Lunch

14-15:16:30

- **Synthesis and characterization of fine particles of La_{0.7}Ca_{0.3}MnO₃ prepared by mechanical ball milling method**, Mohamed Ellouze, Faculty of Sciences of Sfax, Tunisia.
- **Proteomics in Natural Science: Opportunities and Challenges**, Hassan Dihazi (Director Clinical Proteomics laboratories), Georg-August University Goettingen, Germany

- **General Rules for the Production & the Processing of Foodstuffs for Muslims**, Helmy T. Omran Department of Food Technology, Faculty of Agriculture, Suez Canal University, Ismailia, Egypt s
- **Waste-Free Solid-State Organic Synthesis: Solvent-Free Condensation Reactions of Some Hydrazides, aminoazoles and Thiosemicarbazide With Ninhydrin**, Heba Mohamed Abbas Metwally, Hassan Ali Etman, Mona Mohamed El-Kasaby, Abdel-Galil Mohamed Khalil and Mohamed Abbas Metwally (Department of Chemistry, Faculty of Science, Mansoura University, Mansoura, EGYPT.

16:30-16:45 Coffee Break

16:45-18:30

- **Effect of the addition of microsilica on the durability of mortars exposed to the sodium sulfate attack**, Nasser Chelouah, Université Abderahmane Mira Bejaia, Bejaia, Algeria.
- **Environment-Friendly Plastic Materials, produced on the basis of renewable resources**, Hartmut Seliger (Arbeitsgruppe Chemische Funktionen in Biosystemen, Biotechnologie-Zentrum der TFU, Sedanstrasse 14, D 89077 Ulm, Germany)
- **Systemic Approach in teaching and learning organic chemistry**, Ibrahim Zeid, Faculty of Science, Monoufia University, Shibin El-Koam, Egypt
- **Le Magnétisme et ses Applications**, Abderrahmen Selmi, Université du Centre, Monastir, Tunisia

18:30-19:00: Plenary session: sessions' moderators present an overview of their session's contributions

Session III: Engineering Sciences

Session Chairs: Chouaib Benqlilou and Said Kitane

8:30-10:30

- **Evaluation du potentiel énergétique par biométhanisation des décharges publiques situées dans le Bassin Hydraulique de Bouregreg Chaouia.** Lekhlif Brahim, Ecole Hassania des Travaux Publics, Casablanca, Morocco.
- **Application du concept CHEMICAL LEASING : valorisation de l'argile de la commune de Tamlouht,** Meryem Kitane, Mohammed STITOU, Faculté des sciences et Techniques, HASSAN II University, Mohammadia, Morocco, Nassrallah Ahmed OUKACHA, ENIM RABAT et Omar OUCHRI CMPP-CGEM
- **Extraction d'huile et valorisation des déchets agro-alimentaires,** Hassan Elarjane (SIHOM-INNOV, Ain Aouda, Rabat), khouloud, Fatima Ezzahra Zaroual, Mohammed Alaoui El Belghiti (Faculty of Science, Mohammed V University- Agdal, Rabat) and Said KITANE (Ecole Nationale de l'Industrie Minérale, Rabat, Morocco).

10:30-10:45: Coffee Break

10:45-12:45

- **Traitement et valorisation de déchets d'équipement électrique et électronique,** Omar Ait Rahou (Ecotechno, Casablanca) and Said KITANE (Ecole Nationale de l'Industrie Minérale, Rabat, Morocco).
- **Exploitation des déchets miniers,** Yassine Darmane (Mineral Technique Indusry, Rabat) and Said KITANE (Ecole Nationale de l'Industrie Minérale, Rabat, Morocco).
- **Valorisation des schistes Marocaines selon les procédés minéralurgiques** Mamoudou DOUMBOUYA, kacimi kacem (Faculty of Science, Mohammed V University- Agdal, Rabat) Abdelah Alaoui and Said KITANE (Ecole Nationale de l'Industrie Minérale, Rabat, Morocco)., ENIM, Rabat, Morocco.)
- **CP violation in fourth generation decays,** Arhrib Abdesslam, Université Abdelmalek Essadi, Faculté des Sciences et Techniques-Tanger, Morocco.

12:45-14:15: Lunch

14-15:16:30

- **Influence of inclusions and gas bubbles on the liquid metal flow: effect of rheology and particle properties,** Lahbib Zealouk, Darmstadt Technical University, Germany.
- **Pull-in phenomenon in Capacitive MEMS,** Faouzi Lakrad, University Hassan II Ain Chock, Morocco.
- **Soot Characterization with Laser-Induced Incandescence Applied to a Laminar Premixed Ethylene-Air Flame,** Hadeef Redjem (Larbi Ben M'Hidi University, Algeria), KlausPeter Geigle, Wolfgang Meier, Manfred Aigner (German Aerospace Center, DLR, Stuttgart)
- **Apport du Système d'Informations géographiques (SIG) à la cartographie géologique : Exemples d'applications cartes géologiques du Saghro (Anti-Atlas Maroc** Fouad BENZIANE, Abdelaziz YAZIDI, Abderrahim Saadane (Ecole Nationale de l'Industrie Minérale, Morocco), WALCH.J.G, QUICK J.e, STONE.b.d. ALEINIKOFF.J.n., HARRISON R.w. ((United States Geological Survey, United States)

16:30-16:45 Coffee Break

18:30-19:00: Plenary session: sessions' moderators present an overview of their session's contributions

SESSION IV: HUMAN AND SOCIAL SCIENCES and TECHNOLOGY

Session Chair: El Mostafa Chadli

Roundtable 1: 08:30 – 10:30

Moderator: Abdelkrim Belhaj

- **Sciences de l'Homme et Technologie : Nouvelles interactions, nouveaux enjeux**, El Mostafa Chadli, Université Mohammed V – Agdal, Rabat, Morocco.
- **Les problèmes culturels et philosophiques du transfert de la technologie**, Lahkim Bennani Azelarabe, Faculté des Lettres Dhar Mehraz, Fès Morocco.
- **La réception culturelle de produits technologiques**, Bennacer EL Bouazzati, Mohammed V University, Rabat, Morocco.
- **Le virtuel, notre dernière aliénation!**, Abdessamad Tamouro, Université Mohammed V – Agdal, Rabat.

Discussion

10:30-10:45: Coffee Break

Roundtable 2: 10.45 - 12.45

Moderator: Nadjib Ferhat

- **Reflections on deployment of technology in the Moroccan University**, Taieb Belghazi, Université Mohammed V – Agdal, Rabat, Morocco.
- **L'enseignement à distance : vers une intégration des nouvelles méthodes pédagogiques dans l'enseignement universitaire**, Nejmeddine Soughati, Ibn Tofail University, Kénitra, Morocco.
- **L'accompagnement scolaire ou le e-learning dans l'enseignement scolaire**, Abdellaziz Zbadi, Université Mohammed V – Agdal, Morocco.

Discussion

12:45-14:15: Lunch

14-15:16:30

Moderator: El Mostafa Chadli

- **La Psychologie et les environnements technologiques du travail**, Abdelkrim Belhaj, Université Mohammed V – Agdal, Morocco.
- **La gestion des savoirs: le cas du MindMapping**, Elhadj Benmoumen, Université Mohammed V – Souissi, Morocco.
- **L'archéologie préventive, au centre des enjeux scientifiques et des intérêts économiques, dans la recherche et l'exploration pétrolière et gazière en milieu saharien**, Nadjib Ferhat, Centre national de recherche préhistoriques anthropologiques et historiques, Algeria.

Discussion

16:30-16:45 Coffee Break

16:45-18:00

- **L'exploitation des NTIC dans le discours politique au Maroc**, Ahmed Lyagoubi et Sara Mejdoubi, Université Mohammed V – Agdal, Morocco.
- **Le discours associatif à l'épreuve des NTIC**, Nadia Bayed, Université Mohammed V – Agdal, Morocco.

Discussion

18:30-19:00: Plenary session: sessions' moderators/chairs present an overview of their session's contributions

DAY 3: Wednesday, JUNE 23, 2010

- Morning:

08:30-12:30: Roundtable meetings

- **Jordanian-German partnering: distinguished successful story and model,** Marwan Mousa (President of the Jordanian Club of Humboldt Fellows and President of the Jordanian Physics Society), Mu'tah University, Jordan.
 - MAGHREB Humboldtians, the Moroccan Competency Network in Germany and German researchers meet (i) to discuss ways of building a common research agenda through information sharing, goal-setting and strategic planning (ii) to propose sustainable mechanisms for strong, effective scientific research collaboration between Germany and the Maghreb;, and (iii) to produce a plan that will enhance and intensify AvH alumni engagement by offering a vast range of services to boost Germany-Maghreb cooperation.
- Afternoon:
- 13:15-19:00: Work/Field visit to incubator centres

Conference Chair

Abdelhadi Soudi, President of the Maghreb Alexander von Humboldt Alumni Association , Ecole Nationale de l'Industrie Minérale, Morocco

Conference co-chair

Hachim Haddouti, President of Deutsch-Marokkanisches Kompetenznetzwerk (DMK), Germany

Programme committee:

Hassan Dihazi Georg-August University Goettingen, Germany
Malika Abid, Université Mohammed I, Morocco
El Houssine Bouyakhf, Faculty of Sciences, Med V University, Morocco.
El Mostafa Chadli, Université Mohammed V – Agdal. Rabat, Morocco.
Redjem Hadeif, Université Larbi Ben M'Hidi, Algeria
Faouzi Lakrad, University Hassan II Ain Chock, Morocco.
Bouchta Khaoulani, Ecole Nationale de l'Industrie Minérale, Morocco.
Chouaib Benqlilou, Ecole Nationale de l'Industrie Minérale, Morocco
Mohamed Ellouze, Faculty of Sciences of Sfax, Tunisia.
Lahcen Maniar, Caddi Ayad University, Marrakech, Morocco
Kitane Said, Ecole Nationale de l'Industrie Minérale, Morocco
Ibrahim Zeid, Faculty of Science, Monoufia University, Shibin El-Koam, Egypt.
Lahkim Bennani, Faculty of Letters Dhar Mehraz, Fès Morocco.

Organizing committee:

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Malika Abid, Université Mohammed I, Morocco
Lahkim Bennani, Faculty of Letters Dhar Mehraz, Fès Morocco.
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Thami Akki, Ecole Nationale de l'Industrie Minérale, Morocco
Abdelhadi Soudi, Ecole Nationale de l'Industrie Minérale, Morocco
Mouhssine Daoudi, Ecole Nationale de l'Industrie Minérale, Morocco
Lahcen Maniar, Caddi Ayad University, Marrakech, Morocco