



GLOBAL CONFERENCE ON GLOBAL WARMING 2009

JULY 5-9, 2009
ISTANBUL, TURKEY



POCKET PROGRAM

GLOBAL CONFERENCE ON GLOBAL WARMING 2009

SUNDAY, JULY 5, 2009

10:00-19:00 Registration and Setup for Exhibition

MONDAY, JULY 6, 2009

8:30-9:15 **Chair: Feridun Hamdullahpur** **Room: Ballroom**

Opening Remarks

- Prof. Ibrahim Dincer, Conference Chairman
- Prof. Ron Bordessa, President, UOIT
- Dr. Suleyman Gunduz, Chairman, GWCCWC
- Dr. Kadir Topbas, Mayor of Istanbul (TBC)
- Prof. Veysel Eroglu, Minister of Environment and Forestry (TBC)
- Mr. Taner Yildiz, Minister of Energy and Natural Resources (TBC)
- Doc. Dr. Abdullah Gul, President of Turkey (TBC)

9:15-10:10 **Chair: I. Dincer**

Keynote address-1: Hydrogen energy: ultimate solution to global warming
T.N. Veziroglu

10:10-10:30 Refreshment Break

10:30-12:30 **Chair: R. Bordessa**

Keynote address-2: Climate change and governance: state of affairs and actions needed
W. Leal

Keynote address-3: Resolving the financial and climate crises by a global investment plan: The inter-relationship between the global financial crisis and the climate crisis and the emergence of a common solution,
T. Barker

12:30-14:00 **Lunch Break**

14:00-16:00 **Session: Global Warming: Policies and Challenges-I** **SAFIR**

Chair: P. Grammelis

- 39** Policies and strategies of reducing global warming in developing countries: an approach for Turkey, A. Yonten
- 213** Energy policies and strategies in Turkey in relation with the energy and environmental law, O. Armagan
- 103** Global warming and climate change: the situation before and after 2000, A.F. Miguel, A.H. Reis
- 250** An analysis of Chinese policy instruments for climate change mitigation, B. Xu, Q. Sun, R. Wennersten, N. Brandt
- 279** Governance of large-scale environmental problems-the case of climate change, Q. Sun, R. Wennersten, N. Brandt
- 180** Sustainability in the city scale to fight global warming, A. Tokuc, G. Kokturk

MONDAY, JULY 6, 2009

14:00-16:00 Session: Energetic and Environmental Issues-I

YAKUT

Chair: A.H. Assi

- 118** The thermal background of the life of the plants (phenomenologic and photon-electron based approach to photosynthesis, I. Benko
- 84** Reduction of energy cooling in buildings with phase change materials in mild climates, E.H. Bouguerra, A. Hamid, N. Retiel
- 215** Iran situation in environmental sustainable development, challenging and approaches, M. Ravanbakhsh, I. Kazemi
- 350** Conception of a refuse derived fuel (RDF) incineration plant and its environmental benefit, K. Haker, J. Krüger, K. Kuchta
- 191** Towards reducing the fuel-bound nitrogen conversion to no in an air-staged combustor during the combustion of synthetic biomass-derived gas, B. Adouane, W. De jong, G. Witteveen, J. Van Buijtenen
- 378** Performance improvement of IGCC power plant by steam integration between chemical and HRSG processes, C. Lee

MONDAY, JULY 6, 2009

14:00-16:00 Session: Chemical Aspects-I

ZUMRUT

Chair: E. Alper

- 220** Various applications for decreasing of sulfur in lignite, J. Gulen
- 236** Adsorption of aniline from aqueous solutions onto Algerian Montmorillonite clay treated exchanged with diethylammonium: application in wastewater treatment, F. Mohammed-Azizi, S. Dib, M. Boufatit
- 275** A comparative study of elemental and ionic content of precipitation in Turkey, F. Ozturk, A.I. Ilhan
- 284** Adsorption of copper (ii) by activated carbon prepared from Tuncbilek lignite, I. Orbak, R. Yavuz, N. Karatepe
- 105** CO₂ utilization by photocatalytic conversion to lower hydrocarbons and alcohols, M.M. Oymak, B. Ipek, D. Uner
- 297** Investigation of the light hydrocarbons in bursa atmosphere, S. Yorulmaz, M. Civan, G. Tuncel

16:00-16:20 Refreshment Break

MONDAY, JULY 6, 2009

16:20-18:20 Session: Renewable Energy-I

SAFIR

Chair: A. Hepbasli

- 531 Environmental impact and cost analysis of residential systems for concentrated solar power and heat production, C. Zamfirescu, I. Dincer, W.R. Wagar, T. Verrelli
- 245 Study of drying and gasification of biomass residues to produce energy, A. Al-Kassir, J. Ganan, R.A.. Al-Karany, J.S.J. Alonso
- 238 Harnessing wind energy in china to combat global warming, J. Li
- 421 Investigation of usage of hybrid renewable energy system on heating, cooling purposes by means of modeling and analyzing, O. Kincay, Z. Utlu, U. Akbulut, H. Agustos
- 189 Environmental impact of solar energy storage in building envelope for passive solar heating, Y.A. Kara, A.K. Cirakman, K.Comakli
- 212 Prospect of hybrid wind system in the region of Batna, Algeria, M. Aksas

16:20-18:20 Session: Global Warming Models

YAKUT

Chair: T. Barker

- 89 Spatial structure of connection between the troposphere heat content and variations of solar and geomagnetic activities, S.I. Molodykh, V.A. Kovalenko, I.A. Vasil'eva
- 90 The solar activity effect on the troposphere and scenario for climate changes in the 20th century, G.A. Zherebtsov, V.A. Kovalenko, S.I. Molodykh
- 337 Saharan desert dust radiative effects: a study based on atmospheric modeling, D. Santos, M.J. Costa, A.M. Silva, R. Salgado, A. Domingues, D. Bortoli
- 353 Estimation of CO₂ concentration over Turkey by using dispersion model, A. Can, A.T. Atimtay
- 526 Ultraviolet actinic fluxes: measurement and derivation, A.R. Webb, A. Seroji, R. Kift
- 500 Carbon monoxide predictions in urban street by using CLINE-4 and CAL3QHC model, Q.M. Thanoon, N.C. Gupta, D.V. Gupta

16:20-18:20 Session: Greenhouse Gases and Air Pollution-I

ZUMRUT

Chair: B-K. Lee

- 296 Air quality monitoring using a ground-based uv-vis spectrometer at Évora station-Portugal, A.F. Domingues, D. Bortoli, A.M. Silva
- 47 Cost and benefit analysis of dry ice blasting for environmental friendly shipyards, F.T. Akanlar, U.B. Celebi, N. Vardar
- 211 Estimation of CO₂ emissions from merchant ships in Marmara Sea, Turkiye (1999-2008, C. Deniz, Y. Durmusoglu, A. Kilic, B. Cetin
- 276 Trajectory clustering for long range transport of aerosols in Northwestern Turkey, D.D. Genc, G. Tuncel
- 3 Impacts and management of oil spill pollution along the southern Iranian Coastal Areas in Persian Gulf, H.R. Sharifan, N. Banan
- 564 An environmental-benign fish drying technique for better quality and sustainability, A. Kilic, A. Midilli, I. Dincer

19:00-22:00 Welcoming Reception

TUESDAY, JULY 7, 2009

- 8:30-10:10 Session: Sustainable Energy and Global Warming SAFIR**
Chair: M. Rosen
- 354 **Special talk:** Energy sustainability: illustrations of pathways, M. Rosen
400 Population and economic growth: assessing the principal determinants of carbon emissions, G.R. Cranston, G.P. Hammond
77 Flywheel electric storage systems, D. Esiyok
246 Effective integration of membranes for gas separation within an IGCC system for efficient downstream CO₂ capture, N.V. Gnanaprasadam, B.V. Reddy, M.A. Rosen
- 8:30-10:10 Session: Climate Change Impacts-I YAKUT**
Chair: M. Croll
- 249 Climate change: an urban risk multiplier, A.L. Clark
412 The spatio-temporal-severity dynamics of drought in Botswana, B.J. Batisani, B. Yarnal
42 Antarctic Sea ice extent, concentration and properties derived from ship observations and satellite microwave data, B. Ozsoy-Cicek, P. Wagner, S.F. Ackley, H. Xie, A.E. Tekeli
385 Estimation of the economic effects of an increase in typhoon intensity in the Asia Pacific Region, M. Esteban, C. Webersik
520 Twenty million years of palaeoenvironmental evolution along the Southern African West Coast, D. Roberts
- 8:30-10:10 Session: Forestry-I ZUMRUT**
Chair: K. Kuchta
- 55 Wildfire management: a veritable tool for effective and sustainable development of forests as experienced in Ghana, D. Duodu-Asare
131 An investigation of the forest stand changes in lowland region of Guilan Province using remote sensing data, M.H. Khomami, A. Meraji, H.R.M. Jifroudi
144 Effects of deforestation on climate change, H. Poorbabaei, T. Abedi, R. Abedi
153 Study on floristic composition, chorology and ecological structure of Gisoum forest reserve, Talesh, Iran, M. Ravanbakhsh, T. Amini, H. Poorbabaei
166 Survey and identification of typhoon resistant reforestation species, A.N. Balaguer
- 10:10-10:30 Refreshment Break**

TUESDAY, JULY 7, 2009

10:30-12:30 Session: Fuel Cells: Enabling Technologies for Cleaner Environment **SAFIR**

Chair: F. Dogan

- 472 **Special talk:** Hydrogen and fuel cell analysis: stationary and portable applications, F. Dogan, S. Grasman
- 541 Some exergetic sustainability parameters for PEM fuel cells, A. Midilli, I. Dincer
- 539 Efficiency and environmental impact assessments of a trigeneration plant using SOFC and ORC, F. Al-Sulaiman, I. Dincer, F. Hamdullahpur
- 33 Direct ethanol fuel cells as alternative energy generation systems, H. Kivrak, D. Uner
- 326 Study of species distribution and solid oxide fuel cells performance in a 2-D model, H. Mahcene, H.B.Moussa, M. Salah, H. Bouguettaia, D. Bechki

10:30-12:30 Session: Energetic and Environmental Issues-II **YAKUT**

Chair: M. Kanoglu

- 168 Nuclear wastes: facultative disposal methods, L. Kazemi, T. Abedi, A. Meraji
- 471 The role of wall and roof design in amount of energy consumption in Erbil City's newly built houses and its effect on human ecology, A. Ahmed
- 514 Factors influencing waste management in Jinja Municipal Council (JMC), S.M. Mbidde
- 515 Excreta, solid waste disposal and water supply in urban centres in Rakai, N. Elisha
- 148 Thermodynamic analysis of carbon sequestration methods in lignite power plants, C.J. Koroneos, D.C. Rovas
- 295 Investigation of combustion of waste biomass: Case study for telephone poles treated with chemicals, S. Yorulmaz, A. Atimtay

10:30-12:30 Session: Chemical Aspects-II **ZUMRUT**

Chair: S.P Bindra

- 377 The kinetics of carbon dioxide capture by solutions of piperazine and n-methyl piperazine, F.P Gordesli, E. Alper
- 285 Adsorption of SO₂ from flue gas onto activated carbon, I. Orbak, N. Karatepe, R. Yavuz
- 130 A review on carbon capture by adsorption and storage methods, O. Ergun, S. Borukhova, S. Aras, A. Yilmaz, D. Uner
- 184 Effect of metal impregnation on flue gas desulfurization by olive stone based-activated carbon, E. Cetinkaya, N. Karatepe, R. Yavuz
- 40 Study of nickel aluminate catalysts in dry reforming of methane reaction to syngas, N. Salhi, C. Petit, A.A. Kiennemann, C. Rabia
- 568 Major ion chemistry in a semi-arid aquifer in Central Iran, I. Khodapanah, W.N.A.. Sulaiman

12:30-14:00 Lunch Break

TUESDAY, JULY 7, 2009

14:00-16:00 Session: Global Warming: River Basin Ecology-I SAFIR

Chair: W. Bowers

- 474 **Special talk:** Humber river basin research, D. Strickland, W. Bowers
477 Documenting the natural and human environment of the humber river basin of Western Newfoundland: a case study of micro- and macro-environmental history, R. Baehre
475 Monitoring changes in land cover and forest type for the humber river basin using satellite imagery and GIS, J.E. Luther, O.R. Van Lier, D. Piercey
476 Management and delivery of geospatial data and tools in support of integrated land management within the Humber river basin, D. Piercey, J.E. Luther, B. Hearn
478 Humber river basin - environmental planning, N. Novakowski

14:00-16:00 Session: Chemical Aspects-III YAKUT

Chair: V.A. Kovalenko

- 19 Impact of surface ocean acidification on the CO₂ absorption rate, A. Shanableh, T. Merabtene, M. Omar, M. Imteaz
45 Green method for the synthesis of schiff bases, P. Mathur, P. Tomar
74 Contribution to the electrocoagulation treatment of the painting effluents, M.T. Ahmed, T. Chaabane, N. Sabba, R. Maachi., D. Akretche
364 Syngas production via dry reforming of methane, S. Menad, K. Kahina, I.R. Ramos, A.G. Ruiz
85 Synthesis and characterization of Cu/Co-Mg/Al-hydrotalcites based catalysts for the methane dry reforming reaction, S. Houaidji, D. Halliche, F. Touahra, O. Cherifi, F. Bali, L. Jalowiecki-Duhamel
332 Removal of mercury (II) from wastewater effluent, M.S. Medjram, C. Bouchelta

14:00-16:00 Session: Modeling and Simulation of Energy Systems-I ZUMRUT

Chair: C.J. Koroneos

- 581 CFD modeling of NO_x formation in a pilot CFBC power plant, A. Nikolopoulos, I. Rampidis, N. Nikolopoulos, P. Grammelis, E. Kakaras
1 Development of mathematical steady state model for cold box in an ethylene production line, M Adam, Y. Eltaweil, M.E. Ossman, A Konsowa
22 Numerical simulation of a u-shaped type underground heat exchanger in a ground-coupled heat pump (GCHP) system, A. Rostamzadeh, S.H. Shafagh
112 Numerical analysis of heat transfer in some corrugated channels, A. Hajizadeh Aghdam, M.T. Shervanitabar, M.H. Djavareshkian
207 Heat and mass transfer in an ecosystem in transient regime, Z. Aouachria
392 CFD modeling of a close-coupled catalytic converter, E. Gemici, M. Aydin

16:00-16:20 Refreshment Break

TUESDAY, JULY 7, 2009

16:20-18:20 Session: Global Warming: River Basin Ecology-II

SAFIR

Chair: J. Luther

- 479 Evaluation of Artvin-Murgul black locust plantations in terms of biomass production, carbon storage, soil quality improvement and erosion control compared to adjacent Grassland areas, A. Tufekcioglu, S. Guner
- 465 Incorporating water production into forest management planning: a case study in Yalnizcam planning unit, E.Z. Baskent, D. Mumcu Kucuker,
- 282 Red tide and water pollution, S. Sajjadi, S.A. Sajjadi
- 308 Water masses and nutrients in a minor Mediterranean estuary under large damming (the mafrag estuary, Algeria),
M. Ounissi, A. Haridi, O-R. Ziouch, M. Khelifi-Touhami
- 394 A multisystem climate change adaptation process for water sustainability in regional Australia, A. Perdomo, O. Hussain, T. Dillon, E. Chang
- 193 Sediments analyses in a river severally polluted by acid mine drainage in the North East of Algeria, C. Boukhalfa

16:20-18:20 Session: Global Warming: Policies and Challenges-II

YAKUT

Chair: A.L. Clark

- 384 Multimedia, pollution and peace negotiations with mother earth: whose responsibility?, M.M. Huleihil, H.L. Huleihil
- 396 Rainfall variability and trends in semi-arid Botswana: implications for climate change adaptation policy, B.J. Batisani, B. Yarnal
- 376 The position of petroleum stations in Turkey from the aspect of statistics and law, O. Armagan, M. Akin
- 175 Safety endangerment as a consequence of global warming, M. Blagojevic
- 190 Identification of issues and evaluation of CDM framework for Indian industry sector, Y. Komalirani

16:20-18:20 Session: Energy and Exergy-I

ZUMRUT

Chair: B.V. Reddy

- 565 Biomass based energy systems to meet the growing energy demand with reduced global warming: role of energy and exergy analyses, B.V. Reddy
- 86 Exergo-exergetic analysis of micro pin fin heat sinks,
T.Z. Ates, A.C. Ergur, A. Kosar
- 254 Exergy based industrial ecology analysis and assessment of integrated and separate heat and power production systems, A. Abusoglu, M. Kanoglu
- 484 Exergy cost analysis of a diesel engine fueled with various fuels,
H. Caliskan, A. Hepbasli
- 560 Exergy analysis and environmental impact assessment of a photovoltaic-hydrogen production system, A. Yilanci, H.K. Ozturk, I. Dincer, E.Y. Ulu, E. Cetin, O. Ekren
- 549 Examination of global effects of exergetic inefficiency in the cement sector,
Z. Sogut, Z. Oktay, H. Karakoc

19:30-23:00 Banquet and Awards Ceremony

WEDNESDAY, JULY 8, 2009

- 8:30-10:10 Session: Education, Awareness and Training on Climate Change-I SAFIR**
Chair: W. Leal
- 305 Special talk:** The contribution of education towards meeting the challenges of climate change, W. Leal, E. Manolas, P. Pace
- 291** Renewable energy networks between Turkish & European universities (renet), B. Demirel, T.T. Onay, O. Yenigun
- 221** Renet “network in renewable energies between Turkish and European universities, K. Kuchta, K. Haker
- 310** Climate is changing, can we? A scientific exhibition in schools to understand climate change and raise awareness on sustainability good practices, V. Grasso, S. Baronti, F. Guarnieri, R. Magno, F. Vaccari, F. Zabini
- 8:30-10:10 Session: Climate Change Impacts-II YAKUT**
Chair: M. Peepre
- 370** The climatic oscillations of Turkey in recent years, H. Toros
- 20** Linkages between climate change and desert development, H.M. El-Magerbi, I.M. Saleh, S.P. Bindra, E. Otman, A. Abughris, A.G.M. Ramadan
- 550** Perceptions relating scenarios concerning global environmental disasters: a survey across Izmir, E. Kamanlioglu, H. Kupeli
- 349** Impact of land cover change on the summer climate of the Marmara Region, Turkey, E. Sertel, C. Ormeci, A. Robock
- 183** Evaluation and mitigation strategies of global warming effects by refrigerants emitted from car recycling, B-K. Lee, S. Byeon
- 8:30-10:10 Session: Forestry-II ZUMRUT**
Chair: N. Azbar
- 132** Investigation of sowing depth and seed orientation on seedling growth of bamboo (*dendrocalamus hamiltonii*), A. Meraji, T. Abedi
- 217** Investigation of beech increment in elevation levels with trend of climatic changes (case study: Asalem Basin), A. Eslami, M. Roshani, B. Amanzadeh, A.M. Torkashvand
- 253** Experimental investigation on thermal and dielectric properties of date palm fibres and their use as insulating materials, B. Agoudjil, A. Benchaaban, I. Ibos
- 338** Urban forestry as a solution for global warming, S.A. Alawais

10:10-10:30 Refreshment Break

WEDNESDAY, JULY 8, 2009

10:30-12:30 Session: Education, Awareness and Training On Climate Change-II **SAFIR**

Chair: W. Leal

- 311 Climate research and technology meet education: the field experience of a group of high school students to increase awareness on climate change, R. Magno, S. Baronti, R. Grassi, S. Taddei, V. Grasso, F.P. Vaccari
- 287 Voluntary agreements as a vehicle for policy learning, P. Stigson, E. Dotzauer, J. Yan
- 227 Integrating climate change into kenyan schools' curriculum, K. Odero
- 329 Response of Nigerian universities to climate change: an analysis of programmes and initiatives in selected universities, R. Ingwe
- 248 Applied research on greenhouse effect and climate change at school, F. Ugolini, D. Marandola, L. Massetti, M. Tomassone, M. Lanini, A. Raschi
- 301 Identifying problems when following up the effects of local climate change mitigation projects and programmes-experiences from the city of Stockholm, S. Johansson, N. Brandt, R. Wennersten

10:30-12:30 Session: Water Resources and Management Issues **YAKUT**

Chair: N. Novakowski

- 109 The importance of wastewater treatment in shipbuilding industry, F.T. Akanlar, U.B. Celebi, N. Vardar
- 266 Review on municipal sewage sludge management in Turkey and Europe, A. Wurz, T. Onay, K. Kuchta
- 451 Changing water consumption patterns and behaviors as means of water demand management in the Kingdom of Saudi Arabia, K.H. Al-Zahrani
- 508 Irrigation water management for Alwajid aquifer in Saudi Arabia, S.H. Alkhatani
- 225 Simultaneous energy and water minimization in multiple-contaminant systems with flowrate changes consideration, A. Ataei, M.H. Panjeshahi
- 419 Cost optimization model for water supply networks, E. Mendi, C. Bayrak

10:30-12:30 Session: Energy and Exergy-II **ZUMRUT**

Chair: T.H. Karakoc

- 172 Valuating heat conservation in industry by cost allocation, S. Siitonen, H. Holmberg
- 206 Exergy analysis of a gas turbine power plant in Algeria, F. Khaldi, B. Adouane
- 559 Exergy analysis of a photovoltaic-powered refrigeration system, O. Ekren, A. Yilanci, H.K. Ozturk, E. Cetin
- 216 Energy and exergy analysis using anns with experimental data for a vapor compression R134A/R600/R290 mixture refrigeration system, S.M.S. Mahmoudi, B. Farzaneh, A. Hajizadeh Aghdam, H. Nazmara
- 256 Energy and exergy analysis of solar parabolic dish thermoelectric hybrid generator, M. Eswaramoorthy, S. Shanmugam
- 532 Exergetic performance comparison of gasification and pyrolysis processes, Y. Kalinci, A. Hepbasli, I. Dincer

12:30-14:00 Lunch Break

WEDNESDAY, JULY 8, 2009

14:00-16:00 Session: Hydrogen Energy Technologies for a Sustainable Future **SAFIR**

Chair: G. Naterer

- 473** **Special talk:** Recent Canadian advances in sustainable hydrogen production, G. Naterer
- 507** Comparative evaluation of hydrogen production potential of some clostridium species and their co-cultures with undefined anaerobic mixed culture, N. Azbar, F.T. Cetinkaya Dokgoz, T. Keskin, R. Eltem
- 537** Reducing greenhouse gas emissions by a copper-chlorine water splitting cycle driven by sustainable energy sources for hydrogen production, C. Zamfirescu, G. F. Naterer, I. Dincer
- 534** Cost and efficiency analysis of nuclear-based hydrogen production through a copper-chlorine thermochemical cycle, M.F. Orhan, I. Dincer, M.A. Rosen
- 533** Comparison of some geothermal-based hydrogen production methods for better environment and sustainability, M.T. Balta, I. Dincer, A. Hepbasli

14:00-16:00 Session: Greenhouse Gases and Air Pollution-II **YAKUT**

Chair: K.H. Al-Zahrani

- 136** Optimum organic loading rate for semi-continuous operation of an anaerobic process for biogas production from jatropha curcas seed cake, N. Sinbuathong, B. Sillapacharoenkul, R. Khun-anake, D.KJ. Watts
- 268** Role of landfills in increasing greenhouse gases emission - case study:tehran landfills methan emission rate, measured by landgem model, L. Ahmadi, A. Ahmadi, Aa. Ahmadi
- 525** Variations of weekly atmospheric deposition in Erzurum, Turkey, S. Ocak
- 288** Spatial distributions of organic and inorganic pollutants at Aliaga, Turkey, M. Civan, T. Elbir, R. Seyfioglu, S. Sofuoglu, A. Bayram, A. Muezzinoglu, M. Odabasi, G. Tuncel
- 522** Investigation of t shape geometry for the collection of pollution particles, M. Mercimek, H. Yıldırım, A.F. Miguel, M. Aydın
- 545** A parametric study on environmental impact assessment of explosive volcanoes, F. Aydın, A. Midilli, I. Dincer
- 264** Environmental impact assessment of the St. Helens volcanic eruption: A case study, F. Aydın, A. Midilli, I. Dincer

WEDNESDAY, JULY 8, 2009

14:00-16:00 Session: Climate Change Impacts-III

ZUMRUT

Chair: K. Odero

- 96** Mitigating climate change through oil palm cultivation, F.K. Yew, K. Sundram, B. Yusof
- 100** Climate change in the agricultural regions of Jordan, K.K. Alzboon, A. Dahamsheh
- 516** Disaster risk reduction efforts and factors affecting flood disaster management: a case study of Katakwi district-olupe and ngariam camps, M. Silas
- 169** Effects of agriculture on GHGS and mitigable practices, L. Kazemi, T. Abedi, A. Meraji, M. Ravanbakhsh
- 320** Impact of increased temperature on malaria transmission in Burundi, H. Nkurunziza, J. Pilz
- 438** The level of awareness of farmers regarding the negative effects of pesticides on the environment in the Dawadmi region in Saudi Arabia, A.B.A. Alzaidi, E. Ahmed, S.H. Al-Otaibi

WEDNESDAY, JULY 8, 2009

16:00-17:00 Poster Sessions and Refreshment Break

(The poster presenters are requested to present by their posters to explain the work during this poster session. The posters should be set up between 08:00h and 08:30h and should remain up the entire day until 18:00h.)

Chair: C.O. Colpan

- 37** Adsorption of phenolic pollutants on porous copper materials. A comparative study, K. Abdmeziem, Y. Roumila, Y. Bagtache, Y. Mekhezoumi, Y. Couchot
- 38** The resilience of global warming, N.H. Afgan
- 50** Chemical composition of the essential oil of marjoram (origanum majorama l.) from Algeria, F. Tazerouti, F.Z. Bendjerssi, B.I. Djerdjouri, B.Y. Meklati
- 53** Treatment of wastewater containing heavy metals studies of the extraction of copper (II) and lead (II) from middle chlorhydric acid, F. Hassaine-Sadi, S. Chelouaou
- 57** Analysis of natural substances using a new liquid crystal as stationary phase, S. Said
- 61** Novel plasticizer, synthesis of ortho-nitrophenyl octanoate (2-npot) and their application in the preparation of polymer inclusion cellulose triacetate membrane, N. Benosmane, B. Boutemour, S.M. Hamdi, M. Hamdi
- 64** Synthesis and foam power of new biodegradable surfactants, R. Mousli, A. Tazerouti
- 65** Analysis of natural substances using a new liquid crystal as stationary phase, S. Sebih, F. Athman, S. Boudah
- 66** Application of liquid crystal as stationary phase for determination of derivatives phenol in waste water using solid phase extraction, S. Boudah, R. Améraoui
- 68** Structure-nlo property relationships in octupolar materials: tdhf and tddft studies, Y. Bitar, D. Hammoutene

- 69 Olive oil characterization: an experimental and theoretical study, S. Kaddour, D. Hammoutene
- 72 Mesoporous activated carbons obtained from date pits: pore structure development, characterization and adsorption of dyes from aqueous solution, N. Bouchemal, F. Addoun
- 79 Nickel effect on human health: Impulsional pulse polarography a rapid method of concentration determination of metal in aqueous solutions, Z. Hank, S. Boutamine, M. Meklati
- 82 Vanadium effect on human health. Impulsional pulse polarography a rapid method of concentration's determination of metal in aqueous solutions, S. Boutamine, Z. Hank
- 83 Determination of the chemotype of the rosemary in four regions of Algeria: chrea, ghardaia, tebessa and tlemcen, N. Tigrine-Kordjani, F. Chemat, B.Y. Meklati
- 92 An analysis method for degradation kinetics of lowly concentrated PAH solutions under UV light and ultrasonication, S.H. Kwon, J. H. Kim, D. Cho
- 110 Solar radiation impact against the chemical composition of twigs essential oils from Algerian Cedrus Atlantica M .Tree, L. Boudarene, A. Baaliouamer
- 114 An evaluation on PAH degradation and characteristics as media of PVA-derivative hydrogels prepared by using a CGA technique, S.H. Kwon, M. Yoon, D. Cho
- 117 Removal of cadmium ions from aqueous solutions using natural clay, A. Khouider
- 125 Environment impact from ash disposal of the thermal power plant "Kosova A", S. Avdullahi, I. Fejza, R. Bytyqi
- 133 Sheep milk for production cheese Kackavall in Kosova, M. Shukri, H. Beka, I. Fejza, A. Ademi, A. Behrami
- 143 An efficient route to synthesis of 3-(ethylimino)-1-(5-hydroxy-3-methyl-1-phenyl-1h-pyrazol-4-yl) butan-1-one, derivatives of pyrazolin-5-one, synthesis assisted by microwave, R. Yahia
- 147 Composition of the volatile oil from the aerial parts of algerian (bejaia) inula viscosa (L.) Aiton, M. Abdelahdi, F. Abdellatif, B. Berka, A. Hassani
- 151 Vertical distribution of phytoplankton community related to water quality in boukerdene reservoir, North of Algeria, S. Houli, A. Aouabed, N. Bouaicha, F. Ammour
- 152 Biosorption of zinc and cadmium by green algae species: a comparative study, F. Ammour, H. Derias, S. Houli, A. Kettab
- 154 Chemical composition of essential oil of melissa officinalis L and teucrium polium L growing in Algeria, F. Abdellatif, M. Abdellahdi, B. Berka, A. Hassani
- 163 Comparison of classical and ultrasound-assisted extractions of volatiles from pistacia lentiscus L, M. Samira, H. Aicha
- 176 Degradation of azoxystrobin in water under simulated solar irradiation, A. Boudina, C. Emmelin, A. Baaliouamer, R. Baudot, J.M Chovelon
- 177 Visible light degradation of orange II using P-Cu₂O/N-ZNO heterojunction, N. Helaili, Y. Bessekhoud, A. Bouguelia, M. Trari
- 178 Analysis of pollutants such as HPA and phenols on a new HPLC bonded liquid crystal stationary phase, O. Ferroukhi, S. Guermouche, M.H. Guermouche
- 179 Identification of aglycons extracted from leaves of pistacia lentiscus L by chromatographic methods and UV-visible spectrophotometry, N. Hamlat, A. Hassani
- 181 Reevaluation of coal reserves calculation in Kosova basin with new methods, E. Hajra, B. Xhema, S. Avdullahi
- 182 Environment degraded from energetic corporate of Kosova activity and rehabilitation measures, R. Bytyqi, L.B. Kastrati, S. Avdullahi

- 194** Interactions metal-support of metal catalysts support containing Rh/SiO₂, Rh/CeO₂ and Rh/ZrO₂, F. Sadi
- 195** Study of biogenic volatile organic compounds emitted from juniperus communis and juniperus oxycedrus growing in Algeria, Y. Foudil-cherif, N. Yassaa, N. Boutarene, B. Y. Meklati
- 198** Characterization of aliphatic alkanes and polycyclic aromatic hydrocarbons of pm10 aerosols in some Northern Algeria atmospheres, R. Ladj, N. Yassaa, C. Balducci, A. Cecinato, B.Y. Meklati
- 260** In situ X-ray diffraction study of titanium sesquioxide, A. Arezki
- 272** Investigation on draught processes in Guilan Province, Iran, A. Ghodrati
- 283** High temperature x-ray diffraction study of tantalum oxides phases, C. Houria
- 331** E-waste: a state of the art of end of life strategies, M. Rouainia
- 347** A model of a photovoltaic heat pump, C. Renno
- 348** Feasibility analysis of some photovoltaic refrigerators, C. Renno
- 362** Synthesis and characterization of polyamides and copoly(amide thioamide)s, T. Ghezalla
- 404** Experimental and theoretical analysis of the dynamic behavior of an inverse cycle plant, C. Renno
- 407** Preparation and characterization of activated carbons from olive stones and their adsorption properties towards phenol, A. Addoun, L. Temdrara, A. Khelifi
- 426** Application of the environmentally friendly membrane process for purification of MTBE as a fuel additive, N.D. Hilmioglu, S. Tulbentci
- 467** The use of triphosgene as a mild coupling agent for the incorporation of azaproline with phenylalanine in an azapeptide, A. Hafida, Z. Mohamed
- 580** Larvicidal activity against culex pipiens of two algerian verbenaceae essential oils, Z. Safia, B. Aoumeur

WEDNESDAY, JULY 8, 2009

17:00-19:00 Short Course: Global Warming in the Context of Teaching of Thermodynamics **SAFIR**
Chair: O. Arnas.

Lecturer: O. Arnas

17:00-19:00 Session: Chemical Aspects-IV **YAKUT**
Chair: M. Aydin

- 219** Desulphurization methods of flue gases, J. Gulen
339 Carbon dioxide adsorption by MCM-41 synthesized from rice husk, A. Boonpoke, S. Chiarakorn, N. Laosiripojana, S. Towprayoon, A. Chidthaisong
340 Feasibility analysis of raw material usage and pathway modification in polylactic acid production as eco-friendly biodegradable plastic in Indonesia, D. Lo, C. Haryasyah, A. Artanti
345 Deactivation of catalysts Ni/Mgo and Ni/Mgo-ZRO₂ during catalytic oxidation of methane by carbon dioxide, N. Yahi, S. Bakri, S. Menad, S. Tezkratt
374 Trace metals in the bivalve mytilus galloprovincialis from Annaba Coast, Algeria, C. Abdennour, F. Drif
116 Characterization of treated clays for the removal of Pb²⁺ and Zn²⁺, F. Mohammed-Azizi, A. Khouider, M. Boufatit

17:00-19:00 Session: Climate Change Impacts-IV **ZUMRUT**
Chair: A. Kosar

- 517** Frequency analysis of droughts using historical information new approach for probability plotting position: Deceadance probability, Y. Hamdi
523 We have to adopt the “bede” (water gipsy) lifestyle if you don’t stop now, I. Arafat
201 Geoengineering planetary climate change with implication of geologic options, B. Singh
315 Homegeneous climate regions in Pakistan, I. Hussain, J. Pilz, G. Spoeck
281 The change of meteorology predictors in earthquake the north of Iran-Guilan, A. Sajjadi, A. Roohi, S. Sajjadi
386 Global warming impact: Flood events, wet-dry conditions and changing scene in world food security, A.A. Adeloye

THURSDAY, JULY 9, 2009

8:30-10:10 Session: Renewable Energy-II SAFIR
Chair: F. Hamdullahpur

- 563** **Special talk:** Novel biomass production techniques and their role in sustainable energy generation, F. Hamdullahpur
- 422** Energy life cycle assessment of biodiesel fuel obtained from waste cooking oil, Z. Utlu
- 583** Vertically solar irradiation exergy changes in the different layers of atmosphere, M.K. Kaymak, A.D. Sahin
- 186** Matlab-based simulation tool for modeling on-grid photovoltaic systems, A. Assi, M. Jama, K. Al-Kathairi

8:30-10:10 Session: Modeling and Simulation of Energy Systems– II YAKUT
Chair: C. Zamfirescu

- 582** Effect of steam injection on work output and carbon dioxide emissions for a natural gas fired combined cycle power generation system, I. Alaefour, B.V. Reddy
- 399** A numerical study for evaluating performance of centrifugal pump, M. Kaya, M. Aydin
- 208** Magnetic effects on the boundry layer features around a body, A. Zeroual
- 224** Optimization of energy consumption in municipal wastewater treatment plants, A. Ataei
- 346** Analysis of performance optimization curves for hydrogen and JP8-fueled microturbojet engines, O. Turan, T.H. Karakoc

8:30-10:10 Session: Energetic and Environmental Issues-III ZUMRUT
Chair: S. Siitonen

- 142** Experimental energy analysis of a vapor compression refrigeration system using R134a/R600/R290 mixture as a working fluid, S.M.S. Mahmoudi, B. Farzaneh, A.H. Aghdam
- 561** A comparative energy analysis of vacuum type and conventional food cooling systems, H.M. Ozturk, G. Kocer, A. Yilanci, H.K. Ozturk
- 562** Determination of electromagnetic pollution levels of a hybrid photovoltaic-fuel cell system, O. Karakilinc, E. Cetin, A. Yilanci, H.K. Ozturk
- 226** Technical and economical evaluation of oleum elimination from sulfuric acid unit of petrochemical industries, F. Atabi, A. Ataei, R. Mohammadi
- 234** Effects of a suction-line heat exchanger on the performance of pure hydrocarbon fluids as alternative refrigerants, M.M. El-Awad

10:10-10:30 Refreshment Break

THURSDAY, JULY 9, 2009

10:30-12:30 Session: Hydrogen Production and Fuel Cells

SAFIR

Chair: I. Dincer

- 546** Efficiency and environmental impact analyses of biomass based power production systems, C.O. Colpan, F. Hamdullahpur, I. Dincer, Y. Yoo
- 535** Environmental impact and cost analyses of ammonia as a hydrogen source, C. Zamfirescu, I. Dincer
- 202** Solid oxide fuel cell waste heat recovery using organic rankine cycles (ORCs), M. Yari, N. Javani
- 293** Water and heat management in the fuel cells with protons exchanging membrane: State of art, M. Zeroual, Z. Belkhiri, H. Ben Moussa, B. Zitouni, K. Oulmi, D. Haddad
- 413** Effect of various losses on solid oxide fuel cell performance, H. Mahcene, H.B. Moussa, M. Salah, H. Bouguettaia, D. Bechki
- 544** Environmental impact assessment of solar electricity and hydrogen production, A.S. Joshi, B.V. Reddy, I. Dincer

10:30-12:30 Session: Ecosystem and Biodiversity

YAKUT

Chair: I. Benko

- 5** Study the effects of global warming on coral reefs, N. Banan, H.R. Sharifian
- 12** Concentrations of mercury in the liver tissue of golden jackal (canis aureus) from the region of Noor, Iran, H. Malvandi, A. Esmaili-Saria, S.M. Ghasempouria, H. Sharifan, N. Banan
- 15** Biological indication potential of grey mangrove, avicennia marina as bioindicator of heavy metals pollution, H.R. Sharifan, P. Farshchi, M.S. Mortazavi, M.R. Bihamta, N. Banan
- 140** Study on biodiversity of herbaceous species in the rural heritage museum of Guilan, Iran, H. Poorbabaei, R. Abedi
- 269** Biodiversity changes by the alien ctenophore, mnemiopsis leidyi invasion in the Southern Caspian Sea, A. Roohi, A.E. Kideys, A. Sajjadi, R. Pourgholam, A. Hashemian, H. Fazli, A..G. Khenari
- 10** Some data on the genetic structure of the human population in Albania, M.L. Cekani, H. Mankolli

GLOBAL CONFERENCE ON GLOBAL **W**ARMING 2009

THURSDAY, JULY 9, 2009

10:30-12:30 Session: Greenhouse Gases and Air Pollution

ZUMRUT

Chair: A. Midilli

- 482** Experimental investigation on performance and exhaust emissions of a si engine fueled with turpentine and gasoline-like fuel produced from waste lubrication oil, O. Arpa, R. Yumrutas, M.H Alma
- 524** The criteria air pollutants levels during calm atmospheric conditions: a case study, S. Ocak
- 108** The minimization of styrene emission in fiberglass boat production: vacuum infusion method, F.T. Akanlar, U.B. Celebi, N. Vardar
- 9** Same indicators of air pollution in city of Tirana, H. Mankolli, M.L. Cekani, A. Shumeli
- 115** Using dry ice to put stop for the global warming, H. Mohamad, I. Al-Khazraji
- 29** Global warming is natural: enjoy it, R. Arya

12:30-13:00

CLOSURE: Closing Remarks in SAFIR

13:00-14:00 Lunch