



GLOBAL CONFERENCE ON GLOBAL **W**ARMING 2008

JULY 6 - 10, 2008

ISTANBUL, TURKEY



**TÜBİTAK**

The Scientific and Technological  
Research Council of Turkey

**POCKET PROGRAM**

**SUNDAY, JULY 6, 2008**

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

**MONDAY, JULY 7, 2008**

**8:30-9:15**

**Chair: M.A. Rosen**

Opening Remarks

*Prof. Ibrahim Dincer*, Conference Chairman

*Prof. Garry Polonsky*, Founding President, UOIT

*Dr. Kadir Topbas*, Mayor of Istanbul (TBC)

*Mr. Muammer Guler*, Governor of Istanbul (TBC)

*Prof. Veysel Eroglu*, Minister of Environment and Forestry (TBC)

*Mr. R. Tayyip Erdogan*, Prime Minister of Turkey (TBC)

*Dr. Abdullah Gul*, President of Turkey (TBC)

**Room: Ballroom**

**9:15-10:10**

**Chair: G. Polonsky**

**Keynote Address-1**

New knowledge on climate change: Imperatives for action

*R. K. Pachauri*

**Keynote Address-2**

Global and Sectoral Mitigation Potentials to 2030 and the Carbon Price:

Towards Decarbonising the Global Economy

*T. Barker*

**10:10-10:30**

Refreshment Break

**10:30-12:30**

**Chair: G.R. Grob**

Keynote Address-3

A Low Carbon Society Scenario towards 2050 and Their

Economic Consequences

*T. Sawa*

Keynote Address-4

Global Warming Reduction through Ocean Carbon Storage

*I. S. F. Jones*

**12:30-14:00**

Lunch Break

**14:00-16:00**

**Session: Climate Change Impacts**

**Room A: Pinar 1**

**Chair: D.J.C. MacKay**

**377**

Optimal Paths of Climate Change Mitigation and Adaptation Under

Certainty and Uncertainty

*T. Felgenhauer*

**447**

Decentralised Versus Centralised Systems – Or Fighting Fire With Fire? A Review Of

Australian Responses To Its Climate Induced Urban Water Crisis

*J. Warnken, C. Guilding*

**548**

Early Detection Of Climate Change Impact On Agriculture An Israeli Case Study

*N. Kliot*

**550**

Planning for the Impacts of the Caspian Sea Level Rise and Climate Change in the

North of Iran

*Y. Filizadeh, K. Zolfinejad, H. R. Islami*

**576**

Climate Change Impacts On Regional Maize Yields And Possible Adaptation

Measures In Argentina.

*M. I. Travasso, G. O. Magrin, G. R. Rodríguez, S. Solman, M. Núñez*

**590**

The Synergistic Effects Of Adaptation To Climate Change On Local, Subregional Level

*M. Csete*



MONDAY, JULY 7, 2008

- 16:20-18:20 Session: Global Warming Models - I Room A: Pinar 1**  
**Chair: J. Warnken**
- 808** Sustainability Risk Management-based Approach To Global Warming: "Cgw Model"  
*A.K. Yilmaz, H. Karakoc*
- 378** Crop Yield And CO<sub>2</sub> Fixation Monitoring In Asia Using A Photosyntheticsterility Model  
 With Satellites And Meteorological Data  
*D. Kaneko, T. Kumakura, P. Yang*
- 436** Comparison Of Stationary And Non-stationary Extreme Value Models In Climate  
 Change Studies  
*J. Kysely, J. Picek, R. Beranova*
- 467** Calculation Of Global Solar Radiation Based On Cloud Data For Major Cities  
 Of South Korea  
*H. Yoo, K. Lee, S. Park, K. Noh*
- 593** Coal And Fuel Burning Effects On The Atmosphere As Mediated By The Atmopseric  
 Electric Field And Galactic Cosmic Rays Flux  
*A. H. Reis, C. Serrano*
- 359** Blocking Sun With Orbiting Balloons  
*C. Park*
- 16:20-18:20 Session: Ecosystem and Biodiversity - I Room B: Pinar 2**  
**Chair: I.S.F. Jones**
- 310** The Relationship Between Plant Diversity And Physiographic Factors In Ghalarang Protected  
 Area, Ilam, Western Iran  
*H. Poorbabaee, M. Heydari, A. Najafifar*
- 448** Coastal Upwelling Variability Along The Southwest Coast Of India – Global Warming  
*K. M. Krishna*
- 453** Life On Earth From Singlecellular Organisms To Multicellular Organisms -  
 Impact Of Global Warming On Life  
*K. Gupta*
- 463** Bioclimatic Evaluations In The Mountainous Ecosystem Of Dajt-tirana  
*H. Mankolli*
- 477** Ecological Effects Of Heavy Metals (Cd, Pb, Hg, Cr And Its State In Phytoplanktonic Algae  
 And Zooplanktonic Organisms In Abant Lake –Turkey  
*T. Atici, A. Altindag, S. Ahiska, O. Obali*
- 472** Phenological Adaptation Of Cereal Weeds To Climate Variations  
*F. Mohamed and B. Mustapha*

MONDAY, JULY 7, 2008

- 16:20-18:20**    **Session: Chemical Aspects-I**    **Room C: Pinar 3**  
**Chair: L. Karlin**
- 235**    The Effect Of Oxidative Medium For Decreasing Of Sulfur&Mineral Matter Of Çan Lignite  
*J. Gülen*
- 542**    Characterization Of Metal Plating Sludge To Identify It's Environmental Risky  
*Ö. Dere, M. Sari, A. Kanturk, S. Piskin*
- 543**    H<sub>2</sub>SO<sub>3</sub> Leaching Characteristics Of Toxic Metals Recovery From Plating Sludge  
*Ö. Dere, A. Kanturk, M. Sari, S. Piskin*
- 293**    The Biosorption Kinetics Of Cu(II) By *Ulothrix Zonata* From Aqueous Solutions  
*E. Malkoc, Y. Nuhoglu*
- 554**    The Effect Of Reductive Medium For Decreased Of Undesired Parts Of Çan Lignite  
*J. Gülen*
- 27**    From CO<sub>2</sub> To Algae To Fuel - An Integrated Process Engineering Approach  
*G.M. Forde, A. Hoadley, P. Webley, X. D. Chen, K.W. Chua, L.M. Ang, G.C. Gardner,  
J. Wajchman, N. Mohemani*
- 19:00-21:00**    **Welcoming Reception**

TUESDAY, JULY 8, 2008

- 8:30-10:10**      **Chair: T. Barker**      **Room A: Pinar 1**  
**Keynote Address-5**  
 The Global Transition to Sustainable Energy      *G.R. Grob*
- Keynote Address-6**  
 Combating Global Warming via Non-Fossil Fuel Energy Options      *M. A. Rosen*
- 10:10-10:30**      Refreshment Break
- 10:30-12:30**      **Session: Renewable Energy Sources And Carbon Mitigation-Their Impact On Global Warming**      **Room A: Pinar 1**  
**Chair: C. Koroneos**
- 283**      Factors Affecting Global Warming: Environmental Impact Of Solar Cooling And Solar Steam Generation  
*L. Colak*
- 357**      Capacity Of Underground Water Pumping Using Wind Energy Conversion Systems At Dhahran, Saudi Arabia  
*A.Z. Sahin, A. Bolat, A. Al-ahmari*
- 421**      Global Warming: Desert Heat Collection And Conversion Into Electricity  
*M.M. Elarbash*
- 498**      Biofuels Technology Platform Of Thessaly, Greece  
*S. Bezergianni, V. Kazantzi*
- 630**      Role Of Renewable Energy In Sustainable Development  
*A.S. Joshi, I. Dincer, B.V. Reddy*
- 519**      Steam Network Optimization By Utilizing Biomass And Solar Energy Sources In An Oil Refinery  
*M.H. Panjeshahi, S. Perry, L. Ahmadi*
- 10:30-12:30**      **Session: Sustainable Energy And The Environment -I**      **Room B: Pinar 2**  
**Chair: H. Yoo**
- 631**      Towards Green Construction For Reducing Global Warming  
*A.M. Yadghar*
- 407**      Effect Of Clean Energy On The Sustainable Development Of Rural Areas  
*H.R. Sharifan, J. Farzadmehr, N. Banan*
- 648**      A Strategic Program To Reduce Greenhouse Gases Emissions Produced From Food Industry  
*A. Kilic, A. Midilli And I. Dincer*
- 565**      Architectural Approaches Of Global Warming With Recent Developments From Turkey And Other Countries  
*P. Yildiz*
- 420**      Sustainable Practices In Malaysia: Are We Ready For It?  
*N. Z. Abidin*
- 402**      Environmental Education And Training In The Russian Federation Within The Framework Of Bologna Process  
*L. Karlin, L. Saveljev*







TUESDAY, JULY 8, 2008

- 16:20-18:20 Session: Ecosystem and Biodiversity - II Room A: Pinar 1**  
**Chair: N. Caldes**
- 428** Warming Tendency In The Eastern Mediterranean Basin And Its Influence On Culex Pipiens Population Abundance And On The Probability Of West Nile Fever Outbreaks (Israeli Case Study: 2000-2005)  
*S. Paz*
- 563** Discovery Of Antimatter Solving Global Warming  
*M. A. A. Elkholy*
- 580** Global Warming And Wheat Production In Argentina  
*G. O. Magrin, M. I. Travasso, G. R. Rodriguez, S. Solman, M. Nuñez*
- 643** Cyanobacteria For Mitigating Methane Emission From Submerged Paddy Fields  
*U. Mishra, S. Anand*
- 233** Quantifying Carbon Sequestration In A Prosopis Cineraria - Dominated Desert Of The Uae  
*T. Ksiksi, O. Binhajraf*
- 586** Evaluation Of Drought Changes In Isfahan Province  
*M. R. Yazdani, J. Khoshhal, A. Honarbakhsh, M. Azad*
- 16:20-18:20 Session: Hydrogen Production and Fuel Cells – I Room B: Pinar 2**  
**Chair: F. Dogan**
- 502** Environmentally-benign Nuclear-based Hydrogen Production Through A Copper-chlorine Thermochemical Cycle  
*M.F. Orhan, I. Dincer, M.A. Rosen*
- 577** A Parametric Study On Exergetic Aspects Of Hydrogen Energy In Reducing Fossil Fuel Consumption  
*A. Midilli, I. Dincer*
- 584** Reduction Of Greenhouse Gas Emissions Using Various Thermal Systems In A Landfill Site  
*C.O. Colpan, I. Dincer, F. Hamdullahpur*
- 619** Hybrid Solar-hydrogen Systems For Better Environment And Sustainability  
*A. Yilanci, I. Dincer, H. K. Ozturk*
- 626** Environmentally-benign Hydrogen Production From Ammonia For Vehicles  
*C. Zamfirescu, I. Dincer*
- 16:20-18:20 Panel Discussion Session: Climate Change Vulnerability of Water Resources and Mitigation Room C: Pinar 3**  
**Chair: Z. Sen**
- 802** Climate Change Vulnerability of Water Resources and Mitigation  
*Z. Sen*
- Panelists:**  
**A. Uyumaz** Hydraulics and Water Resources Department, Istanbul Technical University, Turkey  
**M. Kadioglu** Meteorology Engineering Department, Istanbul Technical University, Turkey  
**N. Agiralioğlu** Chairman of 5. World Water Forum 2009 and Hydraulics and Water Resources Department, Istanbul Technical University, Turkey  
**M.E. Birpınar** Istanbul Provincial Environment Director, Yildiz Technical University, Turkey
- 19:30-23:00 Banquet and Awards Ceremony**

WEDNESDAY, JULY 9, 2008

- 8:30-10:45**      **Chair: H.L. MacLean**      **Room A: Pinar 1**
- Keynote Address-7**  
Sustainable Energy - without the hot air      *D.J.C. MacKay*
- Keynote Address-8**  
Game Analysis of Kyoto and Post-Kyoto Schemes      *H. Imai*
- Keynote Address-9**  
UNFCCC Process to Combat Global Warming and the Outcomes from the Bali Conference      *K. Simeonova*
- 10:45-11:00**      Refreshment Break
- 11:00-12:30**      **Session: Sustainable Thermal Management for Better Environment**      **Room A: Pinar 1**  
**Chair: M. Arik**
- 405**      Energy Efficient Solid State Lighting And Thermal Management For A Sustainable Future  
*M. Arik, A. Setur*
- 433**      Sustainable Energy For Transportation Applications  
*R.L. Evans*
- 549**      Building Bridges; Integrated Approach For Sustainable Development Through Positive Impact Programming  
*T. Goldberg*
- 578**      A Life Cycle Greenhouse Gas Emissions Perspective On Liquid Fuels From Canadian And U.S. Unconventional Fossil Sources  
*J.M. Mckellar, A.D. Charpentier, J.A. Bergerson, H.L. Maclean*
- 611**      Embodied Carbon: The Concealed Impact Of Residential Construction  
*G.P. Hammond, C.I. Jones*
- 11:00-12:30**      **Session: Water Resources and Management Issues**      **Room B: Pinar 2**  
**Chair: T. Sawa**
- 356**      Daily Pan Evaporation Estimation Using Adaptive Neuro Fuzzy Inference Systems  
*E. Dogan, M. Sandalci, M. Gumrukcuglu*
- 373**      Impacts Of Climate Change On Water Resources In Saudi Arabia  
*F. M. Al Zawad*
- 395**      Effects Of Water Management On Methane Emission From Rice Fields By The Revised Dndc Model  
*K. Smakgahn*
- 475**      North -South Gap In Wastewater Management, A Comparison Study For Germany And Jordan  
*M. Barjenbruch, K. Alzboon*
- 494**      Effects Of Water Management Works In Tarnave River Basin, Romania  
*M. Voda, V. Sorocovschi, R. Ratiu*

WEDNESDAY, JULY 9, 2008

- 11:00-12:30**    **Session: Thermal Energy Storage**    **Room C: Pinar 3**  
**Chair: H. Paksoy**
- 370**    Feasibility Study, Implementation And Performance Evaluation Of A Thermal Energy Storage System  
M.E.S. Farahani
- 403**    Solar Thermal Energy Storage For House Heating Through LiBr / H<sub>2</sub>O Absorption Process: Preliminary Energy Evaluation  
L.P. Nolwenn, L. Lingai, H. Liu
- 454**    Global Warming Is Global Energy Storage  
B. Nordell, B. Gervet
- 618**    CO<sub>2</sub> Mitigation With Thermal Energy Storage  
H. Paksoy, H. Evliya, Ş. Abacı, M. Mazman, Y. Konuklu, B. Turgut, Ö. Gök, M. Yılmaz, S. Yılmaz, B. Beyhan
- 614**    Techno-economic And Environmental Aspects Of A Hybrid Pv–Diesel–Battery Power System For Remote Farm Houses  
E. Akyuz, Z. Oktay, I. Dincer
- 12:30-14:00**    Lunch Break
- 14:00-16:00**    **Session: Global Warming Models-II**    **Room A: Pinar 1**  
**Chair: J. Bartholy**
- 503**    Temperature Variations And Their Effects On Rainfall In Nigeria, West Africa: 1971-2003  
I. Osita
- 560**    Comparison Of Detected Trend And Expected Change Of Extreme Climate Indices In The Carpathian Basin By The End Of This Century  
R. Pongracz, J. Bartholy, P. Szabo, G. Gelybo
- 561**    Analysis Of Regional Climate Change Modeling Experiments For The Carpathian Basin  
J. Bartholy, R. Pongracz, C. Torma, I. Pieczka, P. Kardos, A. Hunyady
- 640**    Climate Variability, Climate Change And Extreme Weather Events Over India  
O.S.R.U. Bhanu Kumar, S.Ramalingeswara Rao
- 352**    Geomagnetic Precursor Of The Increasing Earth's Temperature  
T. Rabeh
- 431**    The Great Season Climatic Oscillation And The Global Warming  
A. Boucenna

WEDNESDAY, JULY 9, 2008

- 14:00-16:00 Session: Energetic And Environmental Issues-II Room B: Pinar 2**  
**Chair: K. Alzboon**
- 280** Yields Analysis And Environmental Evaluation Of Combined Photovoltaic-Thermal Collector In Kuwait Climate  
*A.A. Ghoneim, M.Y. Aljanabi, A.Y. Al-hasan, A.M. Mohammedein*
- 429** Natural Fluids As An Alternative Refrigerant To Vapor Compression Refrigeration System  
*M.A. Sattar, R. Saidur, H.H. Masjuki*
- 369** Effect Of Wind Blown Sand And Dust On Photovoltaic Arrays- Model And Solution  
*A. Assi*
- 571** The New Method For Distributed Cooling Water System Design For Wastewater Temperature Reduction  
*A. Ataei, M. Gharaie, E. Panjeshahi*
- 598** Application Of Ozone Treatment And Pinch Technology In Cooling Water Systems Design To Water And Energy Conservation  
*A. Ataei, M. Gharaie, R. Parand, E. Panjeshahi*
- 660** Co-firing Solid Recovered Fuels (Srf) With Browncoal In Large Scale Pulverised Fuel Power Plants – A Simulation Approach  
*M. Agraniotis, P. Grammelis, E. Kakaras*
- 14:00-16:00 Session: Exergy- I Room C: Pinar 3**  
**Chair: S. Paz**
- 637** A New Approach For Thermo-economics Analysis Of The Industrial Processes  
*Z. Sogut, Z. Oktay, H. Karakoc*
- 546** Exergetic Analysis Of A Micro-turbine/Orc Combined Cycle  
*M. Yari, H. Shaker, A. Zarin*
- 556** Exergetic Performance Comparison Of Various Type Geothermal Power Plants  
*M. Yari, A. Zarin, H. Shaker*
- 575** Application Of Exergy Analysis In Performance Evaluation Of Cooling Tower  
*M. H. Panjeshahi, A. Ataei, M. Gharaie*
- 594** Investigation Of Efficiency In A Cross-flow Heat Recovery Unit Equipped With Cdlvgs  
*I. Kotcioglu, S. Caliskan, E. Manay*
- 803** Exergy Analyses Of Drying Of Broccoli Florets in a Heat Pump Conveyor Dryer  
*N. Colak, M.T. Balta, F. Icier, E. Kuzgunkaya, A. Hepbasli, Z. Erbay*

WEDNESDAY, JULY 9, 2008

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.)

- 215 Visible Light Degradation Of Orange Ii Using Multiple Configurations Of Heterojunctions Based On Copper/TiO<sub>2</sub>  
*N. Helaili, Y. Bessekhoud, A. Bouguelia, M. Trari*
- 217 Alumina Porous Membrane Synthesis And Characterization  
*N. Agoudjil, Z. Malek, T. Benkacem, A. Larbot*
- 277 Global Warming: A New Perspective  
*R. Arya*
- 311 CO<sub>2</sub> Reforming Of Methane To Syngas Over Hydrotalcites Derived Catalysts  
*Z. Abdelsadek, F. Touahra, K. Bachari, A. Saadi, O. Cherifi, D. Halliche*
- 312 Methanol Oxidation Catalyzed By Phosphomolybdic Polyoxometallate Keggin Type  
*L. Dermeche, R. Thouvenot, S. Hocine, C. Rabia*
- 329 Effect Of Cadmium And Mercury On Human Health And Environment  
*Z. Hank, S. Boutamine, M. Meklati*
- 330 Lead And Tin Human Health And Environmental Effects  
*S. Boutamine, Z. Hank And M. Meklati*
- 333 Geographical Diversity And Chemical Composition Relationships Among Cedrus Species In Natural Forest  
*L. Boudarene, A. Baaliouamer*
- 347 Improvement Of Biofuel Ethanol Recovery Using The Pervaporation Separation Technique  
*N. D. Hilmioglu*
- 348 Application Of Pervaporation For Treating Mtbe-contaminated Water/Wastewater  
*N. D. Hilmioglu, A.E. Yildirim, S. Tulbentci*
- 384 Impact, Vulnerability And Inuring To The Climate Changes  
*M. Mirela, B. Gabriela, C. Mariana*
- 388 Chemical Characteristics And Source Reconciliation Of Organic Aerosols In Algiers City Area  
*N. Yassaa, R. Ladj, A. Cecinato, B.Y. Meklati*

WEDNESDAY, JULY 9, 2008

- 393 Biogenic Emission And Essential Oils Of Some Eucalyptus Species: A Comparison Study  
*Y.Foudil-cherif, N. Yassaa, B.Y.Meklati*
- 408 A Study Of Malathion Degradation In Triticum Durum Wheat Species Growing In Algeria  
*O. Dalila, B. Samira, B. Aoumeur*
- 442 Light- Induced Transformation Of Carbendazim In Water  
*A. Boudina, C. Emmelin, A. Baaliouamer, M.F. Grenier-loustalot, J.M Chovelon*
- 452 Steam Reforming Of Methane Over Nickel Aluminium Catalysts With High Al/Ni Ratio  
*N. Salhi, C. Petit, A. Kiennemann*
- 478 Partial Exchange Of The Alkaline Cation In The Layered Niobate  
*N. Belmokhtar, R. Nedjar, H. Rebbah*
- 514 CO<sub>2</sub> Hydrogenation To Methanol On Cu-ZrO<sub>2</sub> Catalysts  
*F. Bali, L. Jalowiecki-Duhamel*
- 520 Surfactant Degradation By Means Of Peroxi – Electrocoagulation  
*E. Yüksel, A. Sengil*
- 538 Estimating Landfill Methane Emissions: An Application Of The Ippc's Waste Models For A Specific Site From Romania  
*M. Petre, D. L. Movileanu, E.M. Minea, C. Patraşcioiu*
- 539 Costs And Investments Forecast Regarding The Environmental Protection In Romania During 2007 – 2013  
*D. L. Movileanu, C. L.I. Onutu, M. Petre*
- 599 The Novel Method For Preparation Of K4Nb6O17  
*W. Ouagagui, R. Nedjar, H. Rebbah*

17:00-19:00 **Short Course: Global Warming in the Context of Teaching of Thermodynamics** **Room A: Pinar 1**  
**Chair: A.F. Miguel**

Lecturer: *O. Arnas*

17:00-19:00 **Session: Chemical Aspects-II** **Room B: Pinar 2**  
**Chair: A. ElKamel**

- 553 CO<sub>2</sub> Absorption In A Mini-module Membrane Contactor  
*G. Pantoleontos, S.P. Kaldis, D. Koutsonikolas, P. Grammelis, G.P. Sakellariopoulos*
- 461 Biodiesel Production From Microalgae Over Heterogeneous Catalysts  
*M. Tuncer, E.S. Umdu, E. Kursat, G. Yilmaz, Y. Durmaz, S. Gokpinar, E. Seker*
- 509 Purification Process Of The Effluents Containing Heavy Metals. Application Of The Systemes Cadmium And Chromium  
*F. Hassaine-Sadi, L. Sadoun, H. Bouchabou*

WEDNESDAY, JULY 9, 2008

- 504 Removal Of Cu+2 And Ni +2 From Aqueous Solution By Algerian Clay Materials  
*S. Dib, A. Khouider, M. Boufatit*
- 482 CO<sub>2</sub> And SO<sub>2</sub> Capture Capability Of Two Greek Limestones Under Fluidized Bed  
Combustion Conditions  
*P. Basinas, P. Grammelis, J.R. Grace, C.J. Lim, G. Skodras, E. Kakaras, G.P. Sakellariopoulos*

17:00-19:00 **Session: Forestry**  
**Chair: N. Klot**

**Room C: Pinar 3**

- 245 The Changing Effect Of Microclimatic Conditions On The Soil Process In  
The East-european Forest-tundra  
*A. V. Pastukhov*
- 387 Stand Structure And Spatial Pattern Of Sweet Chestnut (*Castanea Sativa* L.)  
Trees In The Guilian Forests, North Of Iran  
*H. Poorbabaee*
- 400 India's First Forestry ( A & R) Project Under Cdm Against Global Warming  
*M.S.Haque, K.G.Karmakar*
- 496 Impact Of Global Warming On Trees  
*N. Khan, N. Abas, N. Mariun*
- 523 Deforestation: Environment Challenge And Sustainable Development  
*R. Agrawal, G. Vashistha, R. Mutha*
- 605 Investing The Effect Of Forest Stand Volume On Soil Surface Erosion By  
Geographic Information System (GIS)  
*H.R. Maskani, A. Meraji*

Thursday, July 10, 2008

- 8:30-10:10      Session: Sustainable Energy And The Environment - III      Room A: Pinar 1**  
**Chair: W. Bowers**
- 588** Emission Characteristics Of Diesel Engine Powered Cogeneration Systems  
A. Abusoglu, M. Kanoglu
- 807** The Environmental Effect Of Spray Dryers Used In A Cogeneration System  
Y. Yoru, T.H. Karakoc, A. Hepbasli
- 476** The Passive Solutions For The Reduction Of Energy Cooling In The Buildings  
E.H. Bouguerra, A. Hamid, N. Retiel
- 806** Optimization Of Specific Fuel Consumption Of Hydrogen In Commercial Turbofans For Reducing Global Warming Effects  
T.H. Karakoc, O. Turan
- 386** Rational Determination Of Design Weather Data For Reduction Of Energy Use In Air-Conditioning  
T. Chen, Z. Yu
- 8:30-10:10      Session: Power Plants      Room B: Pinar 2**  
**Chair: P. Grammelis**
- 562** Technical - Economical Assessment Of So<sub>3</sub>/So<sub>2</sub> Removal From Acid Sulphoric Plants In A Petrochemical Industry And Converting It To Ammonium Sulfate  
F. Atabi, A. Ataee, S. Shafizadeh
- 568** A Computer-aided Unified Approach For Selecting CO<sub>2</sub> Control Technologies: Application To Power Plants And Refining Processes  
M. Ba-Shammakh, A. Elkamel
- 569** Robust Optimization For Power Systems Under Uncertainty With CO<sub>2</sub> Mitigation Considerations  
F.Chui, A. Elkamel, M. Ba-Shammakh
- 612** Industrial Plant Design For Innovative In Situ CO<sub>2</sub> Capture Technology For Solid Fuel Gasification  
E. Kakaras, A. Doukelis, P. Klimantos, A. Koumanakos, N. Koukouzas
- 646** Estimating The Effect Of Changing The Number Of World Power Plants On Global Climate Using The Model *Edgcm*  
S. Ebrahimi, V. Goldberg, Ch. Bernhofer
- 567** A Multi-period Optimization Model For Energy Planning With CO<sub>2</sub> Emission Consideration  
H. Mirzaesmaeeli, A. Elkamel, P.L. Douglas, E. Croiset



Thursday, July 10, 2008

- 8:30-10:10**      **Session: Exergy - II**      **Room C: Pinar 3**  
**Chair: N. Ghaddar**
- 366** Exergy Analysis Of Second Generation Micro Heat Sinks  
A. Koşar
- 70** Evaluation Of Using Alternative Fuels In Si Engines By Means Of Exergy Analysis  
I. Sezer, I. Altın, A. Bilgin
- 652** Energy And Exergy Analysis Of A Powder Detergent Unit  
G. Bektaş, F. Balkan
- 653** Energy And Exergy Analyses Of The Power Plant At Eregli Iron And Steel Factory  
T. Adanir, T. Ozdemir
- 804** Analysis Of Energy And Exergy Use And Environmental Impacts In Space Heating,  
 An Application  
Z. Utlu
- 336** Thermodynamic Analysis Of Triple Effect Absorption Refrigeration Systems  
A.H. Aghdam, S.M.S. Mahmoudi
- 10:10-10:30** Refreshment Break
- 10:30-12:30**      **Session: Hydrogen Production And Fuel Cells - II**      **Room A: Pinar 1**  
**Chair: B.A. Nordell**
- 367** Modeling And Simulation Of Anode-supported Sofc By Using Cfd Commercial Software  
M.E.Youssef, T. Lim, R. Song, S. Lee, D. Shin
- 456** Clean Coal Technologies Coal-based Hydrogen Production With CO<sub>2</sub> Capture  
A. Smolinski
- 551** Fuel Cell And Hydrogen Transportation Test Bed Development At The Missouri University  
 Of Science And Technology  
F. Dogan, S.E. Grasman, J.W. Sheffield
- 570** Simulation, Design And Economic Analysis Of Hydrogen Production From Biomass  
M. Ba-Shammakh, A. Elkamel
- 365** Innovative Catalytic Materials For Hydrogen Production  
M.S. Elouchdi, L. Cherif, R. Bachir, A. Choukchou-braham, S. Merad-Bedrane

Thursday, July 10, 2008

**10:30-12:30**    **Session: Human Health Issues-II**    **Room B: Pinar 2**  
**Chair: M. S. Haque**

- 129    Poverty, Environment And Economic Growth-confrontations And Inevitable Nexus  
*H. E. Osman, I. Yukio*
- 444    Impact Of Global Warming And Climate Change On Poverty And Women In India  
*D. Mukhopadhyay*
- 540    Effects Of Global Climate Change On Poverty And Solution Suggestions  
*Ş. Atak, M. Erdogan, A. Yonten*
- 541    Airborne Ragweed Pollen Concentration In Zagreb, Croatia 2005-2007  
*I. Hrga, I. Herljevic, B. Stjepanovic, D. Puntaric*
- 415    The Effects Of Air Pollution On Human Health And Other A Live Creatures  
*N. Banan, F. Kafizadeh, H. R. Sharifian*

**10:30-12:30**    **Session: Global Warming And Turkey**    **Room C: Pinar 3**  
**Chair: M. Tiris**

Panelists:

**M. Karaca**, Head of the Marine and Climate Sciences Department, Istanbul Technical University, Eurasia Institute of Earth Sciences

**H. Nuzhet Dalfes**, Head of the Ecology and Evolution Department, Istanbul Technical University, Eurasia Institute of Earth Sciences

**M. Sahin**, Head of Air Quality Management Department, General Directorate of Environmental Management, Ministry of Environment and Forestry

**12:30-14:00**    Lunch Break

**14:00-16:00**    **Session: Energetic And Environmental Issues - III**    **Room A: Pinar 1**  
**Chair: J. O. Jaber**

- 589    The Prediction Of Environmental Wave-induced Loads On Cylindrical Structures  
*S. Kocabiyik, L.A. Mironova, O.I. Gubanov*
- 595    Time Dependent Turbulent Flow And Heat Transfer Characteristics In Plate-fin Type Cross-flow Heat Exchanger  
*I. Kotcioglu, E. Manay, S. Caliskan*
- 627    Modeling Effect Of Chemical Fertilizer Applications On Methane Emission From Rice Fields  
*K. Smakgahn*
- 805    Residential Solar Power Generation Systems For Better Environment  
*C. Zamfirescu, I. Dincer, T. Verrelli, W.R. Wagar*
- 460    Improvement Of Physical, Chemical And Mechanical Properties Of Construction Material With Using Of Steel Slag  
*A. Heidarizhaleh, E. Mozaffari, M. Ashtiani*
- 664    Fuel Consumption Effect Of Commercial Turbofans On Global Warming  
*O. Turan, T.H. Karakoc*

Thursday, July 10, 2008

- 14:00-16:00**    **Session: Energy Conservation**    **Room B: Pinar 2**  
**Chair: A. Z. Sahin**
- 536**    Performance Evaluation Of A Modified Vapor Compression Refrigeration System Using R134A Instead Of R12  
*A. Rostamzadeh, S.M.S. Mahmoudi*
- 610**    Thermodynamic Analysis Of Carbon Sequestration Methods In Lignite Power Plants  
*K.J. Christopher, S. Christos, R. C. Dimitrios*
- 525**    Energy Analysis And Associated Ghg Emissions Of The Residential Sector In Jordan  
*J.O. Jaber, A. Al-ghandoor, R.H. Fouad*
- 557**    Investigation Of Effect Of Geothermal Absorption Cooling System On Global Warming  
*C. Coskun, Z. Oktay, I. Dincer*
- 404**    Energy Saving Potential Of Transcritical CO<sub>2</sub> Cooling Systems With An Expander  
*A.E. Ozgur, H.C. Bayrakci, H. Cetin*
- 14:00-15:00**    **Forum: How Can we Make Buildings Greener? I**  
**Chair: B. Kilkis**
- 809**    How Can we Make Buildings Greener?  
*B. Kilkis*  
With free discussion with audience
- 15:00-16:00**    **Session: Global Warming: Policies and Challenges –II**  
**Chair: H. Niizawa**
- 810**    Climate Change And Turkey  
*E. Türkmenoğlu*
- 411**    Energy In Egypt: Current Status And Future Prospects  
*A. Hafez, M. Khedr, M. Bad ,K. Elkhatib, H. Gaddala, S. Alhallag, F. Teymour*
- 617**    The Inundations In Romania, Consequence The Climate Changes  
*M. Ciobanu, G. Demian, M. V. Ciobanu*
- 16:00-16:30**    **Closure: Closing Remarks In Room A: Pinar 1**

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