

ICENES 2007, 13th International Conference on Emerging Nuclear Energy Systems, 3 – 8 June 2007, İstanbul/TÜRKİYE

<http://www.icenes2007.org/>

CONFERENCE PROGRAMME

June 3 rd 2007, Sunday		
15:30-20:30 Registration		
June 4 th 2007, Monday		
08:00-09:00 Registration		
Opening Session		
9:30-10:00	Opening speeches Prof. Dr. Sümer Şahin, Conference Chairman Prof. Dr. José M. Martínez-Val, General Chairman Prof. Dr. Kadri Yamaç, President, Gazi University Okay Çakıroğlu, Chairman, Turkish Atomic Energy Authority	
10:00-10:30 Coffee Break		
Session 1: Plenary Session , Chairman: Guillemo Velarde		
10:30-11:20	Keynote Speech “ Overview of Principles and Challenges of Fusion Nuclear Technology ”	Mohamed Abdou
11:20-11:50	A Road Map for the Realization of Global-Scale Thorium Breeding Fuel Cycle by Single Molten-Fluoride Flow	Kazuo Furukawa, et al.
11:50-12:20	NIF: A Path to Fusion Energy	Edward Moses
12:20-13:30 Lunch		
Session 2: Plenary Session , Chairman: Ralph W. Moir		
14:00-14:30	Space Nuclear Reactor Concepts for Avoidance of a Single Point Failure	M. S. El-Genk
14:30-15:00	21 st Century’s Energy: Hydrogen Energy System	T. Nejat Veziroğlu
15:00-15:30	Sustainable Energy Systems and the EURATOM Research Programme	S. Webster and G. Van Goethem
15:30-16:00	R&D Activities of the Joint Research Centre (JRC) and its Involvement in the Development of Future Nuclear Energy Systems	Roland Schenkel
1:00-16:20 Coffee Break		
Parallel Session 3A: The Future of Nuclear Fission , Chairman: Borut Smodiš		
16:20-16:40	Innovative Fission Reactors for this Century	Emilio Minguez
16:40-17:00	Nuclear Power in Space	Samim Anghaie
17:00-17:20	The Fixed Bed Nuclear Reactor Concept	Sümer Şahin, Farhang Sefidvash
17:20-17:40	Challenges of Nuclear Power for the Sustainable Role in Korean Energy Policy	Young Eal Lee
17:40-18:00	Reactor Physics Ideas to Design Novel Reactors with Faster Fissile Growth	V. Jagannathan
Parallel Session 3B: Accelerator Driven Systems I , Chairman: Werner Maschek		
16:20-16:40	Development of the Heat Sink Structure of a Beam Dump for the Proton Accelerator	Wan Young Maeng

16:40-17:00	Neutronic Limits in Various Target Mediums Driven by a Proton Beam of 1 GeV Energy	Gamze Genç, Nesrin Demir, and Hüseyin Yapıcı
17:00-17:20	Study of Fission Cross Sections Induced by Nucleons and Pions Using the Cascade-Exciton Model CEM95	Zafar Yasin, M. Ikram Shahzad
17:20-17:40	Monte Carlo Studies in Accelerator-Driven Systems for Transmutation of High-Level Nuclear Waste	Başar Şarer, M. E. Korkmaz, M. Günay, A. Aydın
17:40-18:00	Calculations of the Main Free Path on Neutron Emission Cross-Section for Spallation Reaction of Target and Fuel Nuclei	E. Tel, H. F. Kışoğlu, A. Kayış Topaksu, A. Aydın, A. Kaplan
Parallel Session 3C: Alternative Energy , Chairman: Kazuhiko K. Kudo		
16:20-16:40	Are the Lessons of the Techno-Economic Studies on the Sulphur-Iodine Cycle Applicable to the other Cycles?	F. Werkoff, C. Mansilla
16:40-17:00	Production Method of Hydrogen by Jet Plasma Process in Hydro Machinery	Farzan Amini
17:00-17:20	Analysis of an Innovative Solar Water Desalination System Using Gravity Induced Vacuum.	Teoman Ayhan, Husain Al-Madani
17:20-17:40	Experimental Investigation Two Phase Flow in Direct Methanol Fuel Cells	Mahmut D. Mat, Yüksel Kaplan, Selahattin Çelik, Aytakin Öztorul
17:40-18:00	Potential of Hydrogen Production from Wind Energy in Pakistan	Mohammad Aslam Uqaili, Khanji Harijan and Mujeebuddin Memon
19.30 WELCOME RECEPTION AT BAHÇEŞEHİR UNIVERSITY		

June 5 th 2007, Tuesday		
Parallel Session 4A: Fusion I , Chairman: Dong-Su KIM		
8:40-9:00	Nuclear Challenges and Progress in Designing Stellarator Power Plants	Laila El-Guebaly
9:00-9:20	Self-Organized Ignition of a Tokamak Plasma	Klaus Schoepf
9:20-9:40	The Study of Inertial Fusion Energy Problem via the Equation of State	Shalom Eliezer, José M. Martínez-Val and M. Murakami
9:40-10:00	Triangularity Effects on the Collisional Diffusion for Elliptic Tokamak Plasma	P. Martin and E. Castro
10:00-10:20	Innovative Three-Dimensional Neutronics Analyses Directly Coupled with CAD Models of Geometrically Complex Fusion Systems	Mohamed Sawan, P. Wilson, T. Tautges, L. El-Guebaly, D. Henderson, G. Sviatoslavsky, T. Bohm, B. Kiedrowski, A. Ibrahim, B. Smith, R. Slaybaugh
Parallel Session 4B: Fission Reactors I , Chairman: Emilio Minguez		
8:40-9:00	Enhancing VVER Annular Proliferation Resistance Fuel with Minor Actinides	Gray S. Chang
9:00-9:20	Preliminary Design of Smart Fuel	Yonghwan Kim, Dongguen Ha, Sungkyu Park, Keeil Nahm, Kyuseok Lee, Jungha Kim
9:20-9:40	Solitary Burn-Up Wave Solution in Multi-Group Diffusion-Burnup Coupled System	X.-N. Chen and Werner Maschek
9:40-10:00	Whole Core Transport Calculation for the VHTR Hexagonal Core	Jin-Young Cho, Kang-Seog Kim, Chung-Chan Lee, and Han-Gyu Joo
Parallel Session 4C: Solar Energy , Chairman: Mohammadreza Nematollahi		
8:40-9:00	Microscopic Morphological Compensation for Phase-Separated Composite Film Thickness	Chia -Fu, Chang , Yi-Ci, Chan, Zou-ni, Wan
9:00-9:20	A Novel GUI Modeled Fuzzy Logic Controller for a Solar Powered Energy Utilization Scheme	İ. H. Altaş and A.M. Sharaf
9:20-9:40	Design and Performance of GaN Betavoltaic device	Hyun-Kyu Jung, Nam-Ho Lee, Sang-Kwon Lee
9:40-10:00	Solar Control on Irradiated Ta ₂ O ₅ Thin Film	Nilgün Doğan Baydoğan, Esra Özkan Zayim
10:00-10:20	Conceptual Design of GaN Betavoltaic Battery Using in Cardiac Pacemaker	M. Mohamadian, S. A. H. Fegghi, H. Afarideh
10:20-10:40 Coffee Break		
Parallel Session 5A: Accelerator Driven Systems II , Chairman: Edward Moses		
10:40-11:00	R&D Activities Around the EUROTRANS Accelerator for ADS Applications	Jean-Luc Biarrotte and Alex C. Mueller
11:00-11:20	Neutronics and Shielding Issues of ADS	Hamid A. Abderrahim, T. Aoust, E. Gonzalez, W. Haeck, E. Malambu, José M. Martínez-Val, Y. Romanets,

		G. Van den Eynde, P. Vaz, C. Vicente
11:20-11:40	Thermal Features of Spallation Window Targets	José M. Martínez-Val, F. Sordo, P. T. León
11:40-12:00	Cermet Fuel Behaviour and Properties in ADS Reactors	Didier Haas, A. Fernandez, D. Staicu, J. Somers, W. Maschek, X. Chen
12:00-12:20	Assessment of the Transmutation Capability of an Accelerator Driven System Cooled by Lead Bismuth Eutectic Alloy	F. Bianchi, V. Peluso, R. Calabrese, X. Chen, W. Maschek
Parallel Session 5B: Fission Reactors II, Chairman: Masaki Ozawa		
10:40-11:00	Reactor Physics Simulations with Coupled Monte Carlo Calculation and Computational Fluid Dynamics	Volkan Şeker, Justin W. Thomas and Thomas J. Downar
11:00-11:20	Linear Pulse Motor Type Control Element Drive Mechanism for the Integral Reactor	Je-Yong Yu, Sunh Choi, Ji-Ho Kim and Doo-Jeong Lee
11:20-11:40	Calculation of Neutron Importance Function in Fissionable Assemblies Using Monte Carlo Method	S. A. H. Fegghi, M. Shahriari, H. Afarideh
11:40-12:00	Sensory Systems for a Control Rod Position using Reed Switches for the Integral Reactor	Je-Yong Yu, Sunh Choi, Ji-Ho Kim and Doo-Jeong Lee
Parallel Session 5C: Energy Technologies, Chairman: Pedro Vaz		
10:40-11:00	Energy Conservation through the Implementation of Co-Generation & Grid Interconnection	M. A. Dashash
11:00-11:20	A Novel CO ₂ Sequestration System for Environmentally Producing Hydrogen from Fossil-Fuels	William Eucker IV
11:20-11:40	Mechanical Alloying of Mg-Co-Ni Powder for Hydrogen Storage	Hadi Suwarno, Andon Insani, Johnny Wahyudi, Eddy S. Siradj, Bambang Herutomo
11:40-12:00	Contribution of Wind Energy to Future Electricity Requirements of Pakistan	Khanji Harijan, Muhammad Aslam Uqaili, and Mujeebuddin Memon
12:20-13:30 Lunch		
Session 6: Plenary Session, Chairman: Shalom Eliezer		
14:00-14:30	Recommendations for a Restart of Molten Salt Reactor Development	Ralph W. Moir
14:30-15:00	Innovative ICF Scheme – Impact Fast Ignition	M. Murakami, H. Nagatomo, T. Sakaiya, et. al.
15:00-15:30	MHR Design, Technology and Applications	David E. Baldwin
15:30-16:00	Nuclear Reactor Development in Korea: It's History and Status	Jongsik Cheong, Insik Kim, Dong-Su Kim
16:00-16:20 Coffee Break		
Parallel Session 7A: Fission Reactors III, Chairman: Samim Anghaie		
16:20-16:40	Transmutation of Minor Actinides in a CANDU Thorium Burner	Sümer Şahin, Şenay Yalçın, Kadir Yıldız, Hacı Mehmet Şahin, Adem Acır, Necmettin Şahin
16:40-17:00	Scenario Analysis for Transuranic Transmutation by Using Fast Reactors	Chang Joon Jeong
17:00-17:20	Feasibility Study of Self Sustaining Capability on Water Cooled Thorium Reactors for Different	Sidik Permana, Naoyuki Takaki, Hiroshi Sekimoto

	Power Reactors	
17:20-17:40	Neutronics of a Liquid Salt Cooled - Very High Temperature Reactor	J. Zakova
17:40-18:00	Typical Steam Generator Tubes Rupture (SGTR) Effect on Thermo Hydraulic Parameters of VVER-1000 Primary Loop	Abbas Zare, Mohammadreza nematollahi, Kamal Hadad, Khosro Jafarpoor, Masood Aminmozaafari
Parallel Session 7B: Hydrogen Energy, Chairman: James C. Kuijper		
16:20-16:40	Solar Pumped Laser and its Application to Hydrogen Production	K. Imasaki, T. Saiki, D. Li, S. Motokosi, M. Nakatsuka
16:40-17:00	Numerical Study of Hydrogen Absorption in a LM-Ni ₅ Hydride Reactor	Kemal Altınışık, Muhittin Tekin, Mahmut D. Mat, Alper Altınışık, T. Nejat Veziroğlu
17:00-17:20	Technologies for Hydrogen Production Based on Direct Contact of Gaseous Hydrocarbons and Evaporated Water with Molten Pb or Pb-	Andrey V. Gulevich, P. N. Martynov, V. A. Gulevsky, V. V. Ulyanov
17:20-17:40	Thermal Design, Technical Economical and Environmental Analyses of a Hydrogen Fired Multi-Objective Cogeneration System	Ali Durmaz
Parallel Session 7C: Fusion & Physics, Chairman: Yasuyuki Nakao		
16:20-16:40	Radiation-Physical Processes at Nuclear-Transmutation of Silicon Doped by Palladium	Sh. Makhkamov, N. A. Tursunov, A. R. Sattiev
16:40-17:00	Plasma Focus System; Design, Construction and Experiments	A. Alaçakır, Y. Akgün, A. S. Bölükdemir, A. Elmalı, H. Karadeniz, T. Öncü, E. Receptoğlu, İ. T. Çakır, Ö. Yeşiltaş, S. Zararsız
17:00-17:20	Quantization of Atomic and Nuclear Rest Mass Differences and Self-organization of Atoms and Nuclei	Fangil A. Gareev, Irina E. Zhidkova
17:20-17:40	The Albedo Problem for Pure-Quadratic Scattering	D. Türeci and R. G. Türeci
DINNER at BALTALIMANI, sponsored by Turkish Atomic Energy Authority Departure at 18:40		

June 6 th 2007, Wednesday		
Parallel Session 8A: Fission Reactors IV , Chairman: Tawfik Al-Kusayer		
8:40-9:00	Noble Gas, Binary Mixtures for Commercial Gas-Cooled Reactor systems”	Mohamed S. El-Genk and Jean-Michel Tournier
9:00-9:20	ACR-1000: Operator-Based Development	B. Shalaby and Ala Alizadeh
9:20-9:40	Plutonium and Minor Actinides Management in Thermal High-Temperature Reactors - The EU FP6 Project PUMA	James C. Kuijper <i>et al.</i>
9:40-10:00	Design Study on Small CANDLE Reactor	Hiroshi Sekimoto and Mingyu Yan
10:00-10:20	Monte Carlo Benchmark Calculations for 400MW _{th} PBMR Core	Hong-Chul Kim, Soon Young KIM, Jong Kyung Kim, and Jae Man Noh
Parallel Session 8B: Lasers & Nuclear reactors , Chairman: Klaus Schoepf		
8:40-9:00	Pulse Reactor system for Nuclear Pumped Laser using Low Enriched Uranium	Toru Obara, Hiroki Takezawa
9:00-9:20	Design Characteristics of Regional Energy Reactor, REX-10	Jong-Won Kim, Hyoung-Kyoun Ahn, Hyeong-Min Joo, Byeong-Ill Jang, Han-Gyu Joo, Moo-Hwan Kim Jong-In Lee and Goon-Cherl Park
9:20-9:40	Applications of Super-High Intensity Lasers in Nuclear Engineering	Rainer Salomaa, Antti Hakola, and Marko Santala
9:40-10:00	A study on physical characteristics of supercritical light-water reactor loaded with (²³³ U-Th- ²³⁸ U) oxide fuel	E. G. Kulikov, N.Shmelev, G. G. Kulikov , V. A. Apse
Parallel Session 8C: Nuclear Reaction Effects , Chairman: David E. Baldwin		
8:40-9:00	Neutronic and Thermal Hydraulic Assessment of Fast Reactor Cooling by Water of Super Critical Parameters	Yu. D. Baranaev, A. P. Glebov*, Vladimir F. Ukraintsev, V. V. Kolesov
9:00-9:20	The Possibility of Introduction the Temporal Scale Hubble in Dynamical Reaction Au+Au At 200 AGeV Studied in Brahms Experiment (Brookhaven - USA)	Besliu, A. Danu, Al. Jipa, I.S. Zgura
9:20-9:40	Purposeful Synthesis of Chemical Elements and Ecologically Pure Mobile Sources of Energy	Vladimir A. Krivitsky and Fangil A. Gareev
10:20-10:40 Coffee Break		
Session 9: Plenary Session, Chairman: Ala Alizadeh		
10:40-11:00	Message addressed by the Minister of Energy Dr. Mehmet Hilmi GÜLER	
11:00-11:25	Development of pyro-reprocessing techniques for advanced nuclear reactor systems	Jean-Paul Glatz, R. Malmbeck, D. Serrano-Purroy, P. Soucek, T. Inoue, K. Uozumi
11:25-11:50	Gamma Ray Beam Transmutation	K. Imasaki and D. Li
11:50-12:15	Results of the IAEA CRP on ‘Studies of Advanced Reactor Technology Options for Effective Incineration of Radioactive Waste’	W. Maschek, A. Stanculescu, V. Gopalakrishnan, B. Arien, E. Malambu, D. Da Cruz, H. Wider, M. Schikorr, J. Uhlř, Ch. Chabert, Y. Wu, A. Rineiski, S. Dulla, M.

		Szieberth, P. Vertes, V. Ignatiev, M. Vorotyntsev
12:15-12.40	The Promises and Challenges of Future Reactor System Developments	Si-Hwan Kim, Moon Hee Chang and Hyun-Jun Kim
12:40-13:40 Lunch		
14.15 SOCIAL EVENT: ISTANBUL CLASSICS		

June 7 th 2007, Thursday		
Parallel Session 10A: Fission Reactors V , Chairman: Rainer Salomaa		
8:40-9:00	Status and overview of INPRO	Masanao Moriwaki
9:00-9:20	Advanced ORIENT Cycle, for Strategic Separation, Transmutation and Utilization of Nuclides in the Nuclear Fuel Cycle	Masaki Ozawa, Reiko Fujita, Shinichi Koyama, Tatsuya Suzuki and Yasuhiko Fujii
9:20-9:40	Techno-Economic Study of Hydrogen Production by High Temperature Electrolysis Coupled with an EPR – Water Steam Production and Coupling Possibilities	R. Rivera-Tinoco, C. Mansilla, F. Werkoff, C. Bouallou
9:40-10:00	Hybrid Nuclear Cycles for Nuclear Fission Sustainability	Mireia Piera, José M. Martínez-Val,
10:00-10:20	Politics of Nuclear Power and Fuel Cycle	Rizwan-uddin
Parallel Session 10B: New Perspectives , Chairman: Didier Haas		
8:40-9:00	Transmutation of High Level Wastes in a Fusion-Driven Transmuter (FDT)	Nesrin Demir, Gamze Genç and Hüseyin Yapıcı
9:00-9:20	Preliminary Neutronic Design of Spock Reactor: A Nuclear System for Space Power Generation	N. Burgio, M. Cumo, A. Fasano, M. Frullini, A. Santagata
9:20-9:40	The GDT-Based Fusion Neutron Source as Driver of a Minor Actinides Burner	K. Noack, A. Rogov, A. A. Ivanov, E. P. Kruglyakov, Yu A. Tsidulko
Parallel Session 10C: Reactor Physics , Chairman: Romney B. Duffey		
8:40-9:00	Monte Carlo Calculation for Different Enrichment Lithium Moderator in a Hybrid Reactor	Hacı Mehmet Şahin, Şenay Yalçın, Taner Altınok and Adem Acır
9:00-9:20	An Advanced Energy System with Nuclear Reactors as an Energy Source	Yasuyoshi Kato, Takao Ishizuka and K. Nikitin
9:20-9:40	Premises for Use of Fusion Systems for Actinide Waste Incineration	Stefan Taczanowski
10:20-10:40 Coffee Break		
Session 11: Plenary Session, Chairman: Mohamed S. El-Genk		
10:40-11:05	EURATOM Strategy Towards Fusion Energy	Carlos Varandas
11:05-11:30	Fast Ignition Studies at Osaka University	Kazuo A. Tanaka and FI Project Team
11:30-11:55	Exergy Analysis of a System Using a Chemical Heat Pump to Link a Supercritical Water-Cooled Nuclear Reactor and a Thermo Chemical Water Splitting Cycle	Mikhail Granovskii, İbrahim Dinçer, Marc A. Rosen and Igor Pioro
11:55-12:20	Laser Enhanced Radioactive Decay and Selective Transmutation of Nuclear Waste	Rainer Salomaa, Pertti Aarnio, Jarmo Ala-Heikkilä, Antti Hakola, and Marko Santala
12:20-13:30 Lunch		
Parallel Session 12A: Nuclear Future , Chairman: Hiroshi Sekimoto		
14:00-14:20	Recent Progress in Stochastic Transport Theory	A. Ziya Akçasu
14:20-14:40	Innovations on Nuclear Energy – What Can a Small Country Contribute?	Borut Smodiš, Milan Čerček
14:40-15:00	Technical Considerations on Nuclear Terrorism	Guillemo Velarde
15:00-15:20	Towards a New World: The Contributions of Nuclear Energy to a Sustainable Future	Romney B. Duffey, A. I. Miller, P. J. Fehrenbach, S.

		Kuran, D. Tregunno and S. Suppiah
Parallel Session 12B: Radiation Effects, Chairman: Jasmina Vujic		
14:00-14:20	Radiation Shielding Performance of Some Concrete	İ. Akkurt, H. Akyıldırım, B. Mavi, S. Kılınçarslan, C. Başyigit
14:20-14:40	Transmutation of Technetium into stable Ruthenium in high flux conceptual Research Reactor	N. Amrani And A. Boucenna
14:40-15:00	Encapsulating of High-Level Radioactive Waste with Use of Ceramic Coatings (Program of Investigations)	Albert Chernikov
15:00-15:20	Determination of shielding parameters for different types of concretes by Monte Carlo methods	Amin Aminian and M. R. Nematollahi
Parallel Session 12C: Alternative Energy, Chairman: İbrahim Dinçer		
14:00-14:20	Potential of Solar Home Systems in Pakistan	Mujeebudin Memon, Khanji Harijan and Mohammad Aslam Uqaili
14:20-14:40	Heat and Mass Transfer Analysis in Intermediate Temperature Solid Oxide Fuel Cells (IT-SOFC)	Bora Timurkutluk, Mahmut D. Mat and Yüksel Kaplan
14:40-15:00	New Energy Opinion Leaders' Lifestyles and Media Usage -- Applying Data Mining Decision Tree Analysis for UNIDO-ICHET Website Users	Mavis Tsai, Ayfer Veziroğlu, Scott Warren, Yunze Que
15:00-15:20	Energy Conundrum, Digital Revolution and Politics	Ömer Ersun
16.00 SOCIAL EVENT: BOAT TOUR ON BOSPHORUS WITH GALA DINNER		

June 8 th 2007, Friday		
Parallel Session 13A: Fusion II , Chairman: Carlos Varandas		
9:00-9:20	D- ³ He Fueled Fusion Devices as a Step towards Total Fusion Safety	Laila El-Guebaly and Massimo Zucchetti
9:20-9:40	Reconstruction and Analysis of Temperature and Density Spatial Profiles from Inertial Confinement Fusion Implosion Cores	R. C. Mancini
9:40-10:00	Study of Conversion Efficiencies for Laser Fusion Rocket like a VISTA in the Laser Plasma Experiments and PIC-Simulations	Yu. P. Zakharov, K. V. Vchivkov, A. V. Melekhov, V. G. Posukh, E. L. Boyarintsev, I. F. Shaikhislamov, H. Nakashima
10:00-10:20	On the Possibility of D- ³ He Fusion Based on Fast-Ignition Inertial Confinement Scheme	Yasuyuki Nakao, K. Hegi, T. Ohmura, M. Katsube, T. Johzaki, Kazuhiko K. Kudo and M. Ohta
Parallel Session 13B: Fission Reactors VI , Chairman: Si-Hwan Kim		
9:00-9:20	Investigation of the Properties of the Nuclei Using on the New Generation Reactor Technology Systems	E. Tel, H. M. Şahin, Şenay Yalçın, Taner Altınok, A. Kaplan, A. Aydın,
9:20-9:40	Reactivity Insertion Accident in a Small Molten Salt Reactor	Yoichiro Shimazu, Nobuhide Suzuki
9:40-10:00	Preliminary Study on Characteristics of Equilibrium Thorium Fuel Cycle of BWR	Abdul Waris, Rizal Kurniadi, Zaki Su'ud, and Sidik Perman
Parallel Session 13C: Societal Issues , Chairman: Masanao Moriwaki		
9:00-9:20	Society Response to Nuclear Energy	Natividad Carpintero Santamaría
9:20-9:40	Usefulness of Under Controlled Powers	Oktay Alniak
9:40-10:00	Impact of the Decommissioning of Nuclear Facilities and Radioactive Waste Trafficking in Africa	Baba Gana Abubakar
10:20-10:40 Coffee Break		
Parallel Session 14A: Fusion III , Chairman: Kazuo Furukawa		
10:40-11:00	Inertial Confinement Fusion and Related Topics	Alexander N. Starodub
11:00-11:20	Studies on the Kinetics of Muon Catalyzed Fusion in the HT Mixture with Very Low Tritium Concentration	S. N. Hosseini Motlagh
11:20-11:40	Fractal Reactor: an Alternative Nuclear Fusion System Based on Nature's Geometry	Todd Lael Siler
11:40-12:00	Thermonuclear Fusion by Mechanical Adiabatic Compression of a Dense Plasma	David W. Kraft
12:00-12:20	Benchmarking the CAD-based ATTILA Discrete Ordinates Code with Experimental Data of Fusion Experiments and to the Results of MCNP code in Simulating ITER	Mahmoud Z. Youssef
Parallel Session 14B: Nuclear Techniques , Chairman: Stefan Taczanowski		
10:40-11:00	Utilizing the Slowing-Down-Time Technique for Benchmarking Neutron Thermalization in Graphite	T. Zhou, A. I. Hawari, B. W. Wehring
11:00-11:20	Sensitivity Analysis of Corrosion product activity in primary coolant of PWR	Muhammad Rafique, Nasir M. Mirza, Sikander M. Mirza

11:20-11:40	Analysis and Improvement of Cyclotron Thallium Target Room Shield	Hajiloo N., Raisali G., Nahid Hajiloo,
11:40-12:00	Enhancement of Nuclear Heat Transfer in a Typical Pressurized Water Reactor by New Spacer Grids	Mohammad Nazifi, Mohammadreza Nematollahi
Parallel Session 14C: Nuclear Physics, Chairman: Kazuo A. Tanaka		
10:40-11:00	Calibration Experiments of Neutron Source Identification and Detection in Soil	N. V. Gorin, E. N. Lipilina, G. V. Rukavishnikov, D. V. Shmakov, A. I. Ulyanov
11:00-11:20	Fusion by QED Confinement?	T. V. Prevenslik
11:20-11:40	RELAP5 SCDAP RIA Transients Analysis	Dr. Gheorghe Negut
11:40-12:00	Fusion Channel of pd Charge-Symmetric Ion Including Photons	Gheisari, Rouhollah
12:20-13:30 Lunch		
Parallel Session 15A: Nuclear Fission Power, Chairman: Laila El-Guebaly		
14:00-14:20	Preliminary Feasibility Study of the Heat-Pipe ENHS Reactor	Massimiliano Fratoni, Lance Kim, Sara Mattafirri, Robert Petroski, Ehud Greenspan
14:20-14:40	Observations on the Candle Burn-Up in Various Geometries	Walter Seifritz
14:40-15:00	Experimental Results from a Reactor Monitoring Experiment with a Cubic Meter Scale Antineutrino Detector	Adam Bernstein
15:00-15:20	Feasibility Study of Small Long-Life Water Cooled Thorium Reactors (WTRs) for Providing Small Quantity of Energy Demands	Ismail, Peng Hong Liem, Sidik Permana, Hiroshi Sekimoto
Parallel Session 15B: Miscellaneous, Chairman: Andrey V. Gulevich		
14:00-14:20	Metaphysics Methods Development for High Temperature Gas Cooled Reactor Analysis	Volkan Şeker, Thomas J. Downar
14:20-14:40	Investigation of Tritium and ^{233}U Breeding in a Fission-Fusion Hybrid Reactor Fuelling With ThO_2	Kadir Yıldız, Necmettin Şahin, H. Mehmet Şahin, Şenay Yalçın, Taner Altınok, Adem Acır, Mustafa Bayrak, Mahmut Alkan, Okhan Durukan
14:40-15:00	Critical Heat Flux Near the Critical Pressure in Heater Rod Bundle Cooled by R-134a Fluid: Effects of Unheated Rods and Spacer Grid	Se-Young Chun, Chan-Whan Shin, Sung-Deok Hong and Sang-Ki Moon
Parallel Session 15C: Low energy reaction and Nuclear Physics, Chairman: Stefan Taczanowski		
14:00-14:20	Investigation of Excitation Functions Using New Evaluated Empirical and Semi-empirical Systematic for 14-15 MeV (n,t) Reaction Cross Sections	E. Tel, A. Aydın, E. G. Aydın, A. Kaplan
14:20-14:40	Low Energy Nuclear Reactions: 2007 Update	Steven B. Krivit
14:40-15:00	Experimental Studies on Cold Fusion and Hydrogen Metal	Claude Peube-Locou von Thulé
15:00-15:20	Tunneling Effect Enhanced by Lattice Screening as Main Cold Fusion Mechanism: A Brief Theoretical Overview	Fulvio Frisone
15:20-16:00 Coffee Break		
Closing session: Plenary Session		
16:00-16:40	Resume, final remarks and Announcement of the 14 th ICENES	

