9th International Conference on Hydrogen Production

July 16 to July 19, Zagreb, Croatia
Conference site: Hotel International

CONFERENCE PROGRAM AT A GLANCE

Day 1: Monday, July 16 (16:00pm – 19:00 pm)

16:00 –19:00 Registration day (Hotel International-reception level)

Day 2: Tuesday, July 17 (8:00am – 20:30 pm)

08:00* – Registrations
09:00-09:20 – Opening ceremony
09:20-10:00 – Keynote lecture (Ibrahim Dincer)
10:00-10:40 – Keynote lecture (Frano Barbir)
10:40-11:00 – Coffee Break I
11:00-12:30 – Oral sessions (**A1**,**D1**,**M2**)
12:30-14:00 – Lunch
14:00-15:30 – Oral sessions (**C**,**J**,**K**)
15:30-16:00 – Coffee Break II
16:00-17:30 – Oral sessions and poster presentations (**F**,**O**,**L**,**P**)
17:30-18:30 – Panel discussion: The Role of Hydrogen in Energy Transition
19:30–Welcome Cocktail

Day 3: Wednesday, July 18 (8:00 am – 23:00 pm)

08:00* – Registrations
08:50-09:30 – Keynote lecture (Nikolaos Lymperopoulos)
09:30-10:00 – Invited talk (Martin Roeb)
10:00-10:30 – Coffee Break I
10:30-12:00 – Oral sessions (**H**,**D2**)
12:00-13:30 – Lunch
13:30-15:00 – Oral sessions (**A2**,**E1**)
15:00-15.30 – Coffee Break II
15:30-17:00 – Oral sessions (**M1**,**I**)
18:00 - Touristic Tour (City of Zagreb, old town)
20:30 - Conference gala dinner

Day 4: Thursday, July 19 (8:00 am – 14:00 pm)

08:00* – Registrations
09:00-09:30 – Invited talk (Pierre Millet)
09:30-10:00 – Invited talk (Eunae Cho)

10:00-10:30 – Coffee Break
10:30-11:00 – Workshop: First Croatian Fuel Cells Powered Bicycle (A. Kovač)
11:00-12:30 – Oral sessions (N,E2)
12:30-12:40 – Closing ceremony (ICH2P&ICRIC)
12:40 –14:00 – Lunch

ICRIC Session

08:00* – Registrations
09:00-9:40 – Keynote lecture (Kamiel Gabriel)
09:40-10:10 – Invited talk (Vlasta Zanki)
10:10-10:30 - Coffee Break
10:30-11:00 – Invited talk (Hrvoje Pandžić)
11:00-12:30 – Oral sessions (IC)
12:30-12:40 – Closing ceremony (ICH2P&ICRIC)
12:40 – 14:00 – Lunch

General notice: Preliminary conference program will be modified according to the final number of the received submissions and specific organizational issues!

Respectfully,

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Sandro Nižetić, PhD, Associate professor,
Conference Chair, ICH2P-2018, ICRIC-2018

CONFERENCE SESSIONS

A1: Hydrogen and Steam Reforming Technology – I

Paper34: AUTOTHERMAL AND STEAM REFORMING OF N-HEXADECANE AND DIESEL TO SYNTHESIS GAS ON Rh-CONTAINED CATALYSTS
Paper36: HYDROGEN PRODUCTION BY OXIDATIVE STEAM REFORMING OF METHANOL OVER ANODIC ALUMINUM OXIDE SUPPORTED CU CATALYST
Paper41: EFFECT OF MOLAR RATIO OF WATER / ETHANOL ON HYDROGEN SELECTIVITY IN CATALYTIC PRODUCTION OF HYDROGEN USING STEAM REFORMING OF ETHANOL
Paper42: THE EFFECTS OF OPERATING CONDITIONS ON THE HYDROGEN PRODUCTION FROM SODIUM BOROHYDRIDE USING BOX-WILSON OPTIMIZATION TECHNIQUE

A2: Hydrogen and Steam Reforming Technology – II

Paper86: COMPUTATIONAL FLUID DYNAMICS-BASED DESIGN IMPROVEMENTS FOR STEAM METHANE REFORMERS
Paper80: EXPERIMENTAL STUDY ON THE PERFORMANCE OF NI-CU/AL2O3 CATALYSTS FOR EFFECTIVE SYNGAS PRODUCTION BY METHANOL STEAM REFORMING
Paper128: LA-DOPED SUPPORTED NICATALYSTS FOR STEAM REFORMING OF METHANE
Paper43: PREPARATION AND CHARACTERIZATION OF NIO/ALUMINA CATALYSTS VIA COMPLEXATION WITH AMMONIA DERIVATIVES ACTIFS IN STEAM REFORMING OF METHANE

C: Solar and Photonic Based Hydrogen Production

Paper3: MODELLING OF A WIND AND SOLAR ENERGY BASED INTEGRATED SYSTEM FOR POWER AND HYDROGEN PRODUCTION FOR A SUSTAINABLE COMMUNITY
Paper54: STUDY OF Mg-Cl HYDROGEN PRODUCTION BY SOLAR PARABOLIC TROUGH COLLECTORS IN THE ALGERIAN DESERT
Paper62: THERMOCCHEMICAL OXYGEN PUMPING FOR IMPROVED HYDROGEN PRODUCTION IN SOLAR

REDOX CYCLES

Paper83: SOLAR HYDROGEN PRODUCTION VIA ALKALINE WATER ELECTROYSIS

D1: Catalytic, Electrolysis and Reforming Technologies – I

Paper23: CATALYTIC HYDROLYSIS OF SODIUM BOROHYDRIDE BY USING BIMETALLIC AND TRIMETALLIC FOAM CATALYSTS

Paper32: IMPROVED ELECTROCHEMICAL PERFORMANCE OF A DIRECT CARBON FUEL CELL BY CATALYST (Co/CeO2) AND/OR CARBONATES INFUSION INTO FUEL FEEDSTOCK: THE CASE OF BITUMINOUS COAL

Paper33: CATALYTIC DECOMPOSITION OF H2S TOWARD H2 GENERATION IN THE PRESENCE OF EXCESS H2O OVER Co3O4/CeO2 MIXED OXIDE CATALYSTS

Paper114: NUMERICAL STUDY ON CATALYTIC HYDROLYSIS OF AMMONIA BORANE IN FIXED BED AND FLUIDIZED BED REACTORS

D2: Catalytic, Electrolysis and Reforming Technologies – II

Paper35: CO CLEANUP OF H2-RICH REFORMATE BY PREFERENTIAL CO METHANATION

Paper39: INFLUENCE OF THERMAL CONDITIONING ON ELECTROSPUN PREPARED COBALT BASE PAN NANOMATS AND ENERGY APPLICATIONS

Paper61: HYDROGEN PRODUCTION THROUGH AUTOTHERMAL REFORMING OF CH4 OVER NI-M/CE0.5ZR0.5O2/AL2O3: EFFECT OF PROMOTER TYPE M = PT, PD, RU, MO, SN

Paper101: INNOVATION OF A FLUE GAS TRI-REFORMING MEMBRANE REACTOR PLANT

Paper110: IR SPECTROSCOPIC MEASUREMENT OF HYDROGEN PRODUCTION KINETICS IN METHANE DRY REFORMING

E1: Hydrogen Production Systems

Paper50: DESIGN AND EVALUATION OF HYDROGEN PRODUCTION USING RH SUPPORTED MEMBRANE REACTOR

Paper58: HYDROGEN PRODUCTION SYSTEM USING A PLASMA MEMBRANE REACTOR

Paper59: AMMONIA DECOMPOSITION USING A PLASMA REACTOR WITH A FLOW CHANNEL

Paper111: A NOVEL CRYOGENIC SYSTEM TO PRODUCE LIQUID HYDROGEN AND LNG FROM COKE OVEN GAS

E2: Hydrogen Production Systems

Paper8: THERMOLYSIS REACTOR DESIGN AND OPERATION FOR PILOT-SCALE COPPER-CHLORINE CYCLE HYDROGEN PRODUCTION

Paper138: INVESTIGATION OF COPPER DEPOSITION ON STEEL IN MOLTEN COPPER CHLORIDE FOR CU-CL CYCLE BASED HYDROGEN PRODUCTION

Paper125: FUZZY LOGIC BASED PULSE WIDTH MODULATION CONTROL TECHNIQUE FOR DRIVING HHO DRY CELL SYSMTEMS

Paper9: RESEARCH OF H2SO4 POISONING OF RU-BASED AND NI-BASED CATALYSTS FOR HI DECOMPOSITION IN THE SULFUR-IODINE CYCLE FOR HYDROGEN PRODUCTION

F: Biomass and Biological Hydrogen Production – I

Paper17: HYDROGEN PRODUCTION FROM METHANE USING BIMETALLIC Ni-Fe CATALYSTS

Paper24: HYDROGEN PRODUCTION BY CATALYTIC METHANE DECOMPOSITION OVER Y DOPED NI BASED CATALYSTS

Paper79: HYDROGEN PRODUCTION FROM SYNGAS USING HYPERTHERMOPHILIC ARCHAEBACTERIA THERMOCOCCUS ONNURINEOUS NA1

Paper88: BIOHYDROGEN PRODUCTION BY VERMIHUMUS-ASSOCIATED MICROORGANISMS USING AGRO INDUSTRIAL WASTES AS SUBSTRATE

Paper115: GROWTH AND HYDROGEN PRODUCTION BY THREE CHLAMYDOMONAS STRAINS CULTIVATED IN A COMMERCIAL FERTILIZER

H: Catalytic and Thermochemical Cycles

Paper10: INFLUENCE OF CATALYST COATED MEMBRANES ON ELECTROCHEMICAL BUNSEN REACTION IN

THE SULFUR-IODINE CYCLE

Paper94: OXIDE PARTICLES AS COMBINED HEAT STORAGE AND SULPHUR TRIOXIDE DECOMPOSITION CATALYSTS FOR SOLAR HYDROGEN PRODUCTION THROUGH SULPHUR-BASED CYCLES

Paper105: NEW-PATENTED CATALYTIC TECHNOLOGY FOR HYDROGEN PRODUCTION BY STEAM REFORMING OF ALCOHOLIC WASTES. LIFE-ECOELECTRICITY PROJECT

Paper112: PRELIMINARY RESULTS OF INTEGRATED HYDROLYSIS REACTOR IN THE CU-CL CYCLE

I: Conventional and High temperature Electrolysis

Paper45: ON THE EFFICIENCY OF PEM WATER ELECTROLYSIS CELLS OPERATING AT ELEVATED CURRENT DENSITIES

Paper69: HYDROXY (HHO) GENERATOR CONTROL SYSTEM with PULSE WIDTH MODULATION (PWM)

Paper28: TEST PROTOCOLS FOR THE QUALIFICATION OF MW-SCALE PEM WATER ELECTROLYSERS IN VIEW OF GRID SERVICES

J: Hydrogen and Combustion Engines

Paper26: RESAERCH OF PERFORMANCE AND EMISSION INDICATORS OF THE COMPRESSION-IGNITION ENGINE POWERED BY HYDROGEN - DIESEL MIXTURES

Paper53: DIESEL HYBRID ELECTRIC VEHICLE CONTAINING HYDROGEN ENRICHED CI ENGINE

Paper67: METALLIC HYDROGEN AND ALUMINUM-ICE AS CLEAN PROPELLANTS FOR HYDROGEN ENERGY GENERATION FOR AEROSPACE PROPULSION: A COMPARATIVE STUDY

Paper82: FUEL AND CO2 EMISSION REDUCTION POTENTIAL ON COMMERCIAL VEHICLE BY APPLYING PEM FUEL CELL AS A POWER SORCE FOR AUXILIARY CONSUMERS

Paper93: EFFECT OF HYDROGEN ADDITION ON RCCI COMBUSTION IN A HEAVY DUTY DIESEL ENGINE FUELED WITH LANDFILL GAS AND DIESEL OIL

Paper131: COMPARISON OF THE EFFECTS OF HYDROGEN AND HYDROXYGEN ADDITIONS ON THE EMISSION CHARACTERISTICS OF A GASOLINE ENGINE

K: Hydrogen Integrated Energy Systems

Paper1: INVESTIGATION OF A SMALL SCALE AUTONOMOUS H2 STATION FOR CYCLING BASED TRANSPORTATION

Paper2: ANALYSIS AND ASSESSMENT OF AN INTEGRATED HYDROGEN FUELLED ENERGY SYSTEM FOR SHIPS

Paper118: PERFORMANCE AND EFFICIENCY ANALYSIS OF A HT-PEMFC SYSTEM WITH AN ABSORPTION CHILLER FOR TRI-GENERATION APPLICATIONS

Paper129: PERFORMANCE ANALYSIS OF COAL GASIFICATION BASED INTEGRATED SYSTEM FOR MULTIGENERATION

Paper134: SMALL-SCALE RENEWABLE ENERGY HYDROGEN SYSTEM: CASE STUDY

Paper123: A FUTURE PERSPECTIVE OF HYDROGEN FUEL CELL ELECTRIC VEHICLES

L: Hydrogen Energy and Hydrogen Economy

Paper74: ELEMENTARY SCIENCE TEACHER CANDIDATES' VIEWS ON HYDROGEN AS FUTURE ENERGY CARRIER

Paper84: DESIGN OF SOLAR HYDROGEN REFUELLING STATION TO BOOST HYDROGEN URBAN CITY MOBILITY

Paper85: OPTIMIZATION OF STAND-ALONE HYBRID RENEWABLE ENERGY SYSTEMS FOR TOTAL ENERGY SUPPLY OF HOUSEHOLDS IN MEDITERRANEAN ENVIRONMENT

Paper121: ON LIQUID PHASE HYDRATES FORMATION IN PIPELINES IN THE COURSE OF GAS NO

Paper135: MULTIGENERATION SYTEM EXERGY ANALYSIS AND THERMAL MANAGEMENT OF AN INDUSTRIAL GLASSMAKING PROCESS LINKED WITH A CU-CL CYCLEN-STATIONARY FLOW

M1: Membrane and Electrodes Technology – I

Paper48: Analysis of Ester Product yield using Resin Catalysts attached on Cellulose Acetate Membrane

Paper102: FABRICATION AND CHARACTERIZATION OF RHODIUM IMPREGNATED CERAMIC ALUMINA MEMBRANE FOR DRY REFORMING OF METHANE

Paper51: PREPARATION AND CHARACTERIZATION OF PALLADIUM CERAMIC ALUMINA MEMBRANE FOR HYDROGEN PERMEATION

Paper60: HYDROGEN SEPARATION IN A PLASMA MEMBRANE REACTOR

M2: Membrane and Electrodes Technology – II

Paper100: ADVANCED CATALYTIC HYBRID INORGANIC MEMBRANES INTEGRATION FOR CO2 CONVERSION
Paper130: MEA WITH NON-PRECIOUS CATALYSTS AND ANION CONDUCTIVE MEMBRANE FOR ELECTROCHEMICAL WATER SPLITTING
Paper17: LIFE CYCLE ASSESSMENT AND ECONOMIC ANALYSIS OF AN INNOVATIVE BIOGAS MEMBRANE REFORMER FOR HYDROGEN PRODUCTION
Paper91: FABRICATION OF POROUS ELECTRODES BY SPACE HOLDER METHOD USING SPARK PLASMA SINTERING

N: Hydrogen Storage Technologies

Paper13: NUMERICAL STUDY ON WATER MANAGEMENT IN HYDROGEN BROMINE REDOX FLOW BATTERY
Paper27: POROUS SILICON THIN FILMS FOR ELECTROCHEMICAL HYDROGEN STORAGE
Paper38: LABORATORY SCALE ULTRASOUND PROMOTED AMMONIA BORANE PRODUCTION VIA METATHESIS REACTION
Paper117: NUMERICAL STUDY ON WATER MANAGEMENT IN HYDROGEN BROMINE REDOX FLOW BATTERY

O: Fuel Cell Technology – I

Paper15: INVESTIGATION OF GRAPHENE OXIDE SUPPORTED PLATINUM – RUTHENIUM ANODE CATALYST BASED DMFCS
Paper29: ELECTRO-OXIDATION OF ETHYLENE GLYCOL ON PTCO METAL SYNERGY FOR DIRECT ETHYLENE GLYCOL FUEL CELL: REDUCED GRAPHENE OXIDE IMPARTING A NOTABLE SURFACE OF ACTION
Paper55: DESIGN AND FABRICATION OF A PLANAR CURRENT COLLECTOR FOR PROTON EXCHANGE MEMBRANE FUEL CELL
Paper87: COOLANT INDUCED VARIABLE TEMPERATURE FLOW FIELD FOR IMPROVED PERFORMANCE OF PROTON EXCHANGE MEMBRANE FUEL CELLS
Paper131: MATHEMATICAL MODELING OF SOFC BASED COMBI BOILER

P: Poster session

Paper49: RU/AL2O3 COATED METAL STRUCTURED CATALYST FOR HYDROGEN PRODUCTION
Paper106: SN-CO-P COMPLEX CATALYST SYNTHESIZED BY GALVANIC CORROSION FOR ALKALINE WATER ELECTROLYSIS
Paper108: HIGHLY POROUS NICKLE-PHOSPHOROUS ELECTRODE FOR OXYGEN AND HYDROGEN EVOLUTION REACTION IN AN ALKALINE ELECTROLYSIS
Paper109: TITANIUM-MOLYBDENUM OXIDE SUPPORT IN OXYGEN EVOLUTION REACTION ELECTRO-CATALYSTS FOR POLYMER EXCHANGE MEMBRANE ELECTROLYTIC CELLS
Paper98: DEMONSTRATION AND DESIGN IMPROVEMENT FOR 5KW HIGH TEMPERATURE POLYMER ELECTROLYTE FUEL CELL STACK
Paper127: A HIGH-TEMPERATURE POLYMER ELECTROLYTE MEMBRANE FUEL CELL INTEGRATED WITH A PACKED BED MEMBRANE REACTOR

IC - Research and innovations

Paper10: CHARACTERIZATION OF FILTERING FLOW FIELD FOR MICROFLUIDIC PARTICLE SEPARATION
Paper18: DYNAMIC ANALYSIS ON A METAMATERIAL BEAM CONSISTED OF TUNABLE SHAPE MEMORY ALLOY ABSORBERS
Paper13: INVESTIGATION OF THE INCLINATION ANGLE EFFECT ON THE PERFORMANCE OF THE ARCHIMEDES HYDRO TURBINE TEST STATION
Paper71: EVALUATION OF THE QUALITY OF MARINE WATERS USING ALGAE MACROPHYTES BIO INDICATORS OF THE LITTORAL REGION OF SKIKDA-ALGERIA
Paper16: REMOTE ROBOT ARM CONTROL FOR LASER MATERIAL PROCESSING UNDER INDUSTRY 4.0 ARCHITECTURE
Paper22: OPTIMIZATION OF WIRE AND ARC ADDITIVE MANUFACTURING PARAMETERS FOR DIFFERENT BASE MATERIALS
Paper24: ON THE MECHANISM DESIGN OF ELECTRIC PARKING BRAKE SYSTEMS