



NATIONAL CATALYSIS CONFERENCE – 7

<http://www.pau.edu.tr/ncc7>

NCC7, PAMUKKALE UNIVERSITY, DENİZLİ,
TURKEY (SEPTEMBER 9-12, 2018)

Dear Colleagues,

We are very pleased to see you at Pamukkale University between **9-12 September 2018** at the **7th National Catalysis Congress** organized by our university in Denizli.

We hope to offer you the opportunity to take a breath in the historical atmosphere of Pamukkale travertines and antique cities besides the satisfying scientific program by organizing the congress in our city of Denizli which is a tourism and industrial city.

The biennial congress program organized by the Catalysis Society organized with internationally recognized participants and invited by the participation of scientists and industrial organizations engaged in research and application in a wide range of "from environmentally friendly catalytic applications to renewable energy applications, petrochemical refining processes to biocatalytic applications" speeches, oral presentations and poster sessions.

We would be delighted to welcome all the scientists, students, public institutions and private sector representatives in the city of Denizli, with the hope that the presentations and discussions during the conference will contribute positively to the country's catalytic research and application.

We would like to thank you for your participation and contribution to the congress to share your knowledge and experience.
Best regards...

On behalf of the Organizing Committee
Professor Dr. Rafet KILINÇARSLAN
Congress Chairman

Day 1 (Sep 9, Sunday)

16:00 - 16:15 Opening Remarks
16:15 - 17:15 PL1 Saim ÖZKAR
17:15 - 17:30 O4 Mehmet YURDERİ
Hydrolytic Dehydrogenation of Hydrazine-Borane ($N_2H_4BH_3$)
Catalyzed by Al_2O_3 Nanofibers Supported Cobalt Nanoparticles
17:45 - 19:00 Reception & Refreshments

Day 2 (Sep 10, Monday)

Session 1(Chairperson: Emrah ÖZENSOY)

09:00 - 10:00 PL2 Krijin de JONG
10:00 - 10:30 Coffee Break

Session 2 Surface Science and Catal. (Chairperson: Selahattin YILMAZ)

10:30 - 10:45 O7 - Emrah ÖZENSOY
Nature of Oxygen Species on Au(111) and Ag(111) Model Catalysts and Their Role in O-H, C-H, C-C, N-H Bond Activation

10:45 - 11:00 O17 - Ali Can KIZILKAYA
Surface Science Investigations on Ammonia Poisoning of Cobalt Fischer-Tropsch Synthesis Catalysts

11:00 - 11:15 O11 - Başar ÇAĞLAR
Oxygenates Chemistry on Metal Surfaces for Modelling Catalytic Biomass Conversion

11:15 - 11:30 O18 - Mehmet Gökhan ŞENSOY
First Principles Investigation of O, CO, CH_3O and OH Adsorption on Gold-Silver Surfaces

11:30 - 11:45 O2 - M. Oluş ÖZBEK
Ab-initio Applications Thermodynamics in Surface Science and Heterogeneous Catalysis

11:45 - 12:00 O33 - Ali UZUN
A QM Study on Interaction between Au-Re Surfaces and WGS Species

12:00 - 13:30 Lunch

Session 3 (Chairperson: Can ERKEY)

13:30 - 14:30 PL3 Iker Aguirrezabal TELLERIA

Session 4 EFCATS YOUNG RESEARCHER CHALLENGE
(Chairperson:Deniz ÜNER)

15:00 - 15:45 Multiple Talks by EFCATS Contenders

15:45 - 16:00 Coffee Break

Session 5 (Chairperson: Ali Can Kızılkaya)

16:00 - 16:15 O13 - Bengi ÖZGÜN ÖZTÜRK

Ruthenium Based Nano-Reactor Systems: Design and Catalytic Application

16:15 - 16:30 O22 - Ahsan JALAL

Record High Partial Hydrogenation Selectivity on A Commercial Supported Nickel Catalyst Coated with Tributyl (Methyl) Phosphonium Methyl Sulfate

16:30 - 16:45 O25 - Özge AKARÇAY

CO_x-Free Hydrogen Production from Ammonia Decomposition over MOF-derived Highly Dispersed Fe-based Catalysts

16:45 - 17:00 O30 - Şansım Bengisu BARIM

Carbon Supported Bimetallic PtCu Nanoparticles by Supercritical Deposition Coupled with Electrochemical Dealloying for ORR

17:00 - 17:15 O9 - Halit L. HOŞGÜN

Microwave-Assisted Conversion of Fructose in the Presence of Alumina Catalyst

17:15 - 19:15 POSTER SESSION

Day 3 (Sep 11, Tuesday)

Session 6 Homogeneous Catal.

(Chairperson: Bekir ÇETİNKAYA)

09:00 - 10:00 PL4 Pierre H. DIXNEUF

10:00 - 10:30 Coffee Break

Session 7 (Chairperson: İsmail ÖZDEMİR)

10:30 - 10:45 O10 - Kenan BULDURUN

Synthesis and Catalytic Activities of N-coordinated Benzimidazole- Palladium Complexes

10:45 - 11:00 O16 - Aydın AKTAŞ

Morpholinoethyl-Substituted PEPPSI Complexes: Synthesis, Characterization and the Catalytic Activity in the Suzuki-Miyaura Reaction in Aqueous Media

11:00 - 11:15 O20 - Hakan ÜNVER

Synthesis of New Carboxamide-Pd (II) Complex and Investigation Its Catalytic Activity

11:15 - 11:30 O32 - Salih GÜNNÄZ

Synthesis of Copper (II) Complexes Bridged by 2,6-bis(benzimidazol-2-yl) Pyridine Derivatives and Their Catalytic Properties in Transfer Hydrogenation

11:30 - 11:45 O31 - Ahmet ERDEM

Ruthenium Complexes Containing Benzimidazol Derivative; Catalytic Activities on Hydrogenation Reaction

11:45 - 12:00 O26 - Sibel DUMAN

High Activity of Copper (0) Nanoparticles in the Absence and Presence of Oleylamine in the Dehydrogenation Dimethylamine Borane

12:00 - 13:30 Lunch

Session 8 Advances in Catal. (Chairperson: Alper UZUN)

13:30 - 14:00 KN1 Serdar ÇELEBİ (TÜPRAŞ)

Recent Catalyst Applications in TÜPRAŞ Refineries

14:00 - 14:15 O27 - Sibel DUMAN

Synthesis of Ceria Supported Manganese (0) Nanoparticle Catalysts and Their Catalytic Use in Hydrogen Generation from Hydrolysis of Sodium Borohydride

14:15 - 14:30 O39 - Gamze GÜMÜŞLÜ GÜR

Importance of Subsurface Hydrogen in Elucidating Reaction Mechanism and Kinetics on Metal Catalysts

14:30 - 15:00 KN2 Ferdi KARADAŞ

Cyanide-Based Assemblies for Light Driven Water Oxidation

15:00 - 15:15 O3 - Ahmet BULUT

Catalytic Reduction of Hexavalent Chromium (VI) to Chromium (III) in the Presence of Pd@GO/APTED Nanocatalyst by using Formic Acid (HCOOH) as Reducing Agent

15:30 - 15:45 O19 - Melike BABUCCI

Tunable Catalytic Performance of Atomically Dispersed Supported Metal Catalysts by Ionic Liquid Coatings

15:45 - 16:15 Coffee Break

Session 9

(Chairperson: Alper TAPAN)

16:15 - 16:30 O6 - Muhammed İRFAN

Fe₃O₄ Modified Mesoporous Graphitic Nitride (mpg-C₃N₄) Photocatalysts for Selective Photocatalytic NO Oxidation and Storage under Visible Light Irradiation

16:30 - 16:45 O15 - Ayşe Gül TÜRE

Photocatalytic Degradation of Textile Dye using ZnO/TiO₂ Mixed Oxide Catalyst

16:45 - 17:00 O1 - Kübra BİLGİN

Photocatalytic Performance of Pristine and Boron Doped TiO₂ Nanotube Arrays Under Sun and UV-Visible Light

17:15 - 17:30 O14 - Gülşah TÜRKMEN

Synthesis and Determination of Photophysical Parameters of Some Pd-catalyzed 1,8 Naphthalene imide Derivatives

19:00 - 21:00 Gala Dinner

Day 4 (Sep 12, Wednesday)

Session 10 Applied Catal.

(Chairperson: Ayşe Nilgün AKIN)

09:00 - 09:30 KN3 Ziya GÜRÜN (TÜPRAŞ)

Catalysts in Oil Refining

09:30 - 10:00 KN4 Shahin SAFFARI (PETKİM)

Effective Utilisation of Heterogeneous Catalysts and Catalytic Processes in PETKİM

10:00 - 10:30 Coffee Break

Session 11 (Chairperson: Ayşe Nilgün AKIN)

10:30 - 11:00 KN5 Can ERKEY

Reaction Kinetics Modeling as an Alternative to Dynamometer in Engine & Aftertreatment System Calibration

11:00 - 11:15 O12 - Özge D. BOZKURT

Glycerol Etherification with Isobutene for The Production of Fuel Additives

11:15 - 11:30 O38 - Bahar İPEK

Continuous Methanol Production from Methane Using N₂O as Oxidant

11:30 - 11:45 O5 - Kerem Emre ERCAN

Fine-tuning Redox Reactivity of Precious Metal-free LaCo_xMn_{1-x}O₃ Hybrid Perovskite Catalysts with Bulk Oxygen Vacancies

11:45 - 12:00 O29 - Selmi E. BOZDAĞ

Cu/SiO₂ as a New Catalyst for the Direct Stepwise Conversion of Methane to Methanol

12:15 - 12:30 O24 - Tolga KOÇER

Highly Dispersed Nickel Nanoparticles on Graphene Aerogels as Catalysts for Hydrogen Production from Ammonia

12:30 - 12:45 Closing Remarks & Award Ceremony

14:00 - 18:00 **Excursion**

- Denizli Cable Car and Bağbaşı Plateau
- Laodikeia Ancient City
- Travertines of Pamukkale