



**8th INTERNATIONAL CONFERENCE
ON COAL SCIENCE**

Instituto Nacional del Carbón, CSIC
Oviedo (España)

10 a 15 september 95

PRELIMINARY NOTICE
Scientific topics

A. Fundamentals and General Aspects

**A.1. Physical, Chemical and Petrographic
Characterization**

- A.1.1. Physical Structure and Properties
- A.1.2. Coal as a Molecular Solid
- A.1.3. Chemical Composition and Constituents
- A.1.4. Mineral Matter and Trace Element
Characterization
- A.1.5. Mineral-Organic Matter Interactions
- A.1.6. Coal Geology: Chemistry and Physics
of Coalification
- A.1.7. Coal Petrography
- A.1.8. Correlation between Microscopic and
Chemical Properties
- A.1.9. Advanced Characterization Techniques

A.2. Structure and Chemical Reactivity

- A.2.1. Coal Solubilization
- A.2.2. Solvent Swelling
- A.2.3. Free Radical Chemistry
- A.2.4. Depolymerization, Mechanism and
Reactions
- A.2.5. Selective Degradation
- A.2.6. Model Compound Studies
- A.2.7. Biochemistry of Coal
- A.2.8. Oxidation and Weathering

**B. Coal Combustion and Conversion
Science**

B.1. Combustion and Gasification

- B.1.1. Kinetics and Reaction Mechanisms
- B.1.2. Ignition
- B.1.3. Carbon Burnout
- B.1.4. Mineral Matter Effects. Ash and Slag
Formation and Characterization
- B.1.5. Catalysts for Gas-Carbon Reactions
- B.1.6. Heat and Mass Transfer in Gas-Carbon
Reactions
- B.1.7. Kinetics and Mechanisms of SO_x and
NO_x Formation
- B.1.8. Chemistry, Extent and Control of
Chlorine Emissions

B.2. Pyrolysis and Carbonization

- B.2.1. Kinetics and Reaction Mechanisms
- B.2.2. Characterization of Pyrolysis Products
and Residues
- B.2.3. Mass and Heat Transfer Phenomena
- B.2.4. Fundamentals of Thermoplasticity
- B.2.5. Influence of Process Variables on Coke
Formation
- B.2.6. Coke Properties
- B.2.7. Mesophase Formation
- B.2.8. Special Carbon Products from Coal

B.3. Liquefaction and Hydropyrolysis

- B.3.1. Kinetics and Reaction Mechanisms
- B.3.2. Roles of Hydrogen Gas and Solvent
- B.3.3. Influence of Coal Constituents and
Characteristics
- B.3.4. Catalysts for Coal Liquefaction
- B.3.5. Influence of Process Variables.
Liquefaction under Non-Traditional
Conditions
- B.3.6. Model Compounds
- B.3.7. Coal Liquefaction Derived Products.
Characterization, Upgrading and Purification
- B.3.8. Co-Processing of Coal with Other
Feedstocks

C. Coal and the Environment

C.1. Pre-Utilization Aspects

- C.1.1. Coal Cleaning Science
- C.1.2. Bulk and Surface Properties of Fine
Coal
- C.1.3. Trace Elements, Minerals and their

Aqueous Solubility

- C.1.4. Coal Waste Disposal and Utilization
- C.1.5. Chemistry of Sulphur and Nitrogen in
Coal
- C.1.6. Chemistry of Chlorine in Coal
- C.1.7. Novel Desulphurization Methods:
Organic Sulphur Removal
- C.1.8. Biochemical Treatment of Coal

**C.2. Utilization and Post-Utilization
Aspects**

- C.2.1. Abatement of NO_x
- C.2.2. Abatement of SO_x
- C.2.3. Sorbent Chemistry
- C.2.4. Hot Gas Depuration
- C.2.5. Science of Emission Reductions: CO₂,
N₂O
- C.2.6. Coal Science and Greenhouse Effects
- C.2.7. PAH Emissions from Coal Processing
- C.2.8. Ash and Fly Ash Formation and
Disposal
- C.2.9. Reutilization of Residues from Coal
Conversion Processes

Para mayor información

Dr. Juan M.D. Tascón
8th ICCS Scientific Programme Chairman
Instituto Nacional del Carbón, CSIC
Apartado 73
33080 Oviedo, Spain
Fax +34.8.529.76.62

**9NAS JORNADAS CIENTIFICO
TÉCNICAS DE INGENIERÍA**

Maracaibo (Venezuela)

21 a 26 mayo 95

Información

Universidad de Zulia, Facultad de Ingeniería
Fax: 58-61 523765, 512197, 523759
