The 3rd Iraqi Petroleum Conference (IPC 2010)

Iraqi Oil & Gas
Post 2003 Exploration & Production
22 and 23 September 2010

The Imperial College
180 Queen’s Gate, London SW7, UK.

Sponsors
Target Exploration
Day One: Wednesday 22 September 2010

Northern Iraq: New Discoveries, Developments, Petroleum Systems and Oil & Gas Habitat

8.00 - 8.55 Registration

Chairmen: Dr. M. Al-Chalabi and Dr. T. Al-Uqaili

9:00 (A1) Conference Opening Remarks.
Dr. M. W. Ibrahim
Target Exploration, London, UK.

9:20 (A2) Iraq Oil Policy: Why, When and How?
• **Why?** Iraq Oil the Jewel in a Global Context.
  Iraq Oil Vital Techno-Economic Statistics.
  Iraq and ME Reserves and Peak Oil.

• **When?** In the New Era Post-2003 of the CPA.
  Provisional Government.
  The Constitution and Al-Maliki Government.

• **How?** The Background of the Draft Petroleum Law.
  Baghdad and Erbil Struggle over Power.
  The Race between PSA of Erbil and Service Contracts of Baghdad.

**Mr. T. Shafiq.**
Consultant Petroleum Engineer, Kingston, UK.

10:00 (A3) The Fiscal Regime of Iraqi Upstream Oil Contracts.
• The significance of the fiscal regime for the contracting parties.
• Comparative analysis of the fiscal regimes of the Model Contracts and their implications.
• The main variables, caps and conditions of the fiscal regimes:
  1. Signature bonus,
  2. Remuneration fee,
  3. State partner,
  4. Corporate Income Tax,
  5. Splitting formula,
  6. R-factor (progressivity),
7. Stabilisation clauses,
8. Administrative overhead charges,
9. Commencement and caps of payments,
10. Deemed revenues,
11. Baseline production,
12. Depletion rate,
13. Performance factor.

- Computation of how much each IOCs get in Remuneration fees.
- The importance of early recovery of invested capital in the economics of the fields development.
- Rumaila oilfield as case study.
- Basic parameters of the awarded oilfields.
- Concluding remarks

Mr. A. Jiyad.
Petroleum Economist, Vaksdal, Norway.

10:30 (A4) Geodynamic Evolution and Hydrocarbon Potential of Mesopotamian Basins.

- Introduction.
- Geodynamic Evolution of Mesopotamian Basin During Mesozoic.
- Consequences of Geodynamic Evolution on Facies Distribution.
- Consequences of Geodynamic Evolution on Fluids Distribution and Migration.
- Summary and Conclusions.

Dr. A. Al-Mashadani, Ph.D., D.Sc.
Chairman, Nahrain Oil Services and Chairmen of Board of Trustees, Al Rasheed University, Syria.
**11.00-11.25 Morning Coffee and Poster Session**
*Chairmen: Dr. A. Fenghour*

**B. Petroleum Systems and Habitat (I): North Iraq (Session 1).**
*Chairmen: Dr. Mahboub Al-Chalabi and Dr A. Al-Mashadani.*

**11:30 (B1) Miocene Evaporites of North and Northwest Iraq.**
- Introduction.
- Geological Setting.
- Sampling.
- Results.
- Petrography of Fat’ha (Lower Fars) Evaporites.
- Interpretations.
- Conclusions.

*Prof. Ali I. Al-Jubouri*¹, *Sahar A. Qassim*² and *Abdul Salam M. Al-Tarif*³, 1 Research Centre for Dams & Water Resources, Mosul University, Iraq, 2 Geology Department, Mosul University, Iraq, 3 Applied Geology Department, Tikrit University,

**12:00 (B2) Formation Evaluation of Cretaceous Mauddud Carbonate Formation, Khabbaz Field, Kirkuk Area, N. Iraq.**
- Location of Khabbaz Oil Field in the Tectonic Subdivisions of Iraq.
- Stratigraphy of the Reservoir Units of Khabbaz Oil Field.
- Structural Motif of Mauddud Reservoir: Khabbaz Oil Field.
- Conclusions.

Dr. F. M. Qader*, Dr. B. Al-Qayim and Dr. F. Al-Beyati.
Dept of Geology, Sulaimani University, Sulaimani, Kurdistan, Iraq.

12:30 (B3) Construction of Large-scale Exploration Model of Northern Iraq from Diverse Regional Datasets.

- Dr. Everett Rutherford Jr.¹*, Dr. Walter H. Pierce¹ and Dr. Muhammad W Ibrahim².
  ¹Consultant Geologists, StartExp, Cypress, TX 77429 USA.
  ²R&D Manager, Target Exploration, London, UK.

13.00-14.00 Lunch and Poster Presentations
Chairmen: Dr. A. Fenghour

C. Oil and Gas Resources of Iraq: Operation Problems and Commonsense Solutions.
Chairmen: Dr A. Fenghour and Dr. A. Al-Mashadani.

14:00 (C1) Exploration and Development of Iraqi Oil and Gas Fields are Generating New Business Opportunities for Service Companies.
- Introduction.
- Awarded PSAS and Updated Activities in Kurdistan, NE. Iraq. (Map)
- Awarded PSCS Bid Round 1&2, Updated Activities in Central & Southern Iraq.
• Gas Bid Round 3 in September 2010: Akkaz, Mansuriyah and Siba Gas Fields.
• Legal, Administrative Challenges and Disputes.
• Standard Service Contracts Requirements. Modern Data Management & Storage Services.
• Infrastructures Requirements and Services, Challenges Versus Realization.
• Update Active Available Services in Kurdistan and other Parts of Iraq (List of Companies).
• Progress in Security, Insurance and Banking Services.
• Future of Oil and Gas Industry of Iraq. Conclusions & Recommendation.

Mr. H. Jaza Kader.
Consultant Petroleum Engineer, Sulaimani, Iraq.

14:30 (C2) Problematic Cross-Border Resources of Iraq.
• Introduction: 1900-2010 Shifts in Iraqi Borders.
• Turkey-Iraq Cross-Border Resources.
• Syria-Iraq Cross-Border Resources.
• Jordan-Iraq Cross-Border Resources.
• Saudi Arabia-Iraq Cross-Border Resources.
• Onshore and Offshore Kuwait-Iraq Cross-Border Resources.
• Onshore and Offshore Iran-Iraq Cross-Border Resources.
• Other Cross-Border Problems Affecting the Resources and HC Industry of Iraq.
• Summary, Conclusions and Recommendations.

Dr. M.W. Ibrahim.
Target Exploration, London, UK.
15:00-15.25 Afternoon Tea and Poster Presentation
Chairmen: Dr. A. Fenghour

D. Petroleum Systems and Habitat (II): North Iraq (Session 2)
Chairmen: Dr. M. Al-Warrak and Dr. T. Al-Uqaili

15:30 (D1) Organic Matter and Source Rock Potential of the Paleocene Aliji Formation in Qumar Oil Field, NE Iraq.
- Dr. D. Baban.
  Lecturer, Geology Department, College of Science, Sulaimani University, Sulaimani, Iraq.

16:00 (D2) New Paleo-shorelines of the Prolific Eocene, Oligocene and Miocene Sequences across Zagros Fold-Thrust Belt in Kurdistan, NE Iraq.
- Dr. F. Ameen and P. Qader.
  Lecturer, Dept. of Geology, College of sciences, University of Sulaimani, Sulaimani, Iraq.

16:30 (D3) Controls on the Microporosity Distribution of the Eocene-Oligocene Ramp Carbonates of SE Kurdistan, NE Iraq.
- Importance of Microporosity.
- Aim.
- Facies Distribution.
- Matrix Textures.
- Stable Isotopes.
• Implications and Conclusions.

Mrs. A. A. Ghafur.
Ph.D. Candidate, School of Earth and Ocean Sciences, Cardiff University, Cardiff, UK.

17:00 – 17:30 Panel Discussions and Chairmen Closing Remarks
• Iraqi Kurdistan Oilfield activities: Technical, Legal, Political and Future?
• Pre-requisites and Recommendations for Safe Exploitation of Shared Iraqi Oil and Gas Fields.

Dr. M. Al-Chalabi, Dr. M. Ala, Dr. A. Al-Mashadani, Dr. T. Al-Uqaili, Mr. H-J Qader and Mr. T. Shafiq.

Participants and Spouses are invited to 3rd IPC dinner

- The Time: 20.00-22.30
- The Date: Wednesday 22nd September 2010
- The Place: TBA.
Day Two: Thursday 23 September 2010
Central, West, South & Offshore Iraq: Developments, Petroleum Systems and Oil & Gas Habitat

8.00-8.55 Registration

E. Petroleum Systems and Habitat (III): South Iraq
Chairmen: Dr E. Rutherford and Dr A. Al Jubouri.

9:00 (E1) Opening Remarks
Dr. M.W. Ibrahim.
Target Exploration, London, UK.

- Study area location and borders.
• Tectonic and Stratigraphic setting.
• Samples and methods.
• Results.
• Conclusions.

Mr. Qusay H. Abeed¹, Sabine Heim¹, Amer Alkhafaji², Ralf Littke¹,
¹ Institute of Geology and Geochemistry of Petroleum and Coal at RWTH Aachen University, Aachen, Germany.
² Department of Chemistry, University of Babylon, Babylon, Iraq.

9:50 (E3) Modeling Hydrocarbon Generations of the Basrah Oil Fields, Southern Iraq; Based on Petromod and Palynofacies.
• Introduction.
• Material.
• Model Development.
• Model Analysis.
• Palynofacies Assessments.
• Evidence for Oil Expulsion.
• Source rocks Hydrocarbon Phases.
• Conclusions.

Prof. T. K. Al-Ameri¹, Mohamed S. Ali² and Janet Pitman³
¹ University of Baghdad, Department of Geology, Baghdad, Iraq.
² Ministry of Iraqi Oil, Exploration Company, Baghdad, Iraq
³ US Geologic Survey, Denver, Colorado, USA
10:30 (E4) Generation, Migration, and Origin of the Upper Jurassic - Middle Cretaceous crude oil in the Mesopotamian Basin, Southern Iraq.

- Location of Study Area.
- Samples, Methods and Results:
  - GC-FID.
  - GC-MS.
  - Sulphur content and API Gravity.
- Conclusions:
  - Possible source rock.
  - Migration pathways.

Mr. Qusay Abeed* and Ralf Littke.
Institute of Geology and Geochemistry of Petroleum and Coal at RWTH Aachen University, Aachen, Germany.

11.00-11.25 Morning Coffee and Poster Session
Chairmen: Dr. A. Fenghour

F. Petroleum Systems and Habitat (IV): Central Iraq
Chairmen: Dr. A. Al-Jubouri and Dr E. Rutherford.

11.30 (F1) Sedimentological Studies of the Jeribe Formation at Selected Wells in Northern Hamrin, Ajil, Khashab and Jadida Oil Fields, North Iraq.
- Aim and Locations of Studied Wells
- Data and Methods of Study.
- Stratigraphic Position.
• Depositional Model.
• Micro-facies.
• Diagenetic Processes.
• Porosity Types.
• Conclusions.

Prof. Moutaz A. Al-Dabbas*, Jassim A. Al-Jassim, Yassin S. Al-Jwaini and Khedar Al-Sagri
College of Science, University of Baghdad, Baghdad, Iraq

12:00 (F2) Khasib and Tanuma Oil Sources, East Baghdad Oil Field, Central Iraq.
• Introduction.
• Material and Methods.
• The Khasib and Tanuma Formations.
• Hydrocarbon Generation assessments.
• Source Rocks Maturation Modeling.
• Hydrocarbon Migration Pathways.
• Conclusions.

Prof. T. K. Al-Ameri.
Professor of Playnology and Petroleum Geology, Department of Geology, College of Science, University of Baghdad, Baghdad, Iraq.

12:30 (F3) Computer Model for Flash Calculations of Heavy Oils Using the Soave - Redlich - Kwong Equation of State.
•

Dr. Mohammed S. AL-Jawad and Omar F. Hassan*.
Department of Petroleum Engineering, College of Engineering, University of Baghdad, Baghdad, Iraq.

**13.00-14.00 Lunch and Poster Presentations**
*Chairmen: Dr. A. Fenghour*

**G. Local, Regional and Global Strategies for the Hydrocarbon Resources of Iraq.**
*Chairmen: Dr M. Al-Chalabi and Dr. A. Al Mashadani.*

**14:00 (G1) The Big-push Strategy for Upstream Petroleum Development of Iraq: Feasibility Profiles For Production, Depletion and Revenues Scenarios.**
- Between November 2008 and May 2010 the Ministry of Oil adopted a big-push strategy by signing 12 long-term technical service contracts (LTTSCs) comprising 14 brown and green oilfields.
- Total proven reserves of these oilfields mount to 68 billion barrels (BBLs), representing 59.1% of Iraq’s currently proven reserves.
- Based on these contracts the profiles of production, depletion and revenues are calculated for each of the oilfields.
- When fully developed there total production capacity would reach a plateau of ca 12 million barrels per day (MB/D) sustainable for six/seven consecutive years 2017-22/3.
- They could generate substantive influx (trillions) of oil export revenues during a duration of 20 (25) years.
- But depleting the country’s most prized oilfields rapidly.
- Discussion of the feasibility of attaining these objectives, identified critical determinants and challenges and outlines the main schools of thoughts pro and against the adopted fast tempo big-push strategy.
Four development scenarios are conceptually explored and components of relevant coping strategy to face such eventualities are proposed.

Conclusions: Since the nature of the LTTSCs impose significant risks on Iraq, the Iraqi side should start earnestly preparing for such eventualities as soon as possible to mitigate any negative effects and take predetermined precautionary measures at the right time/stage.

Mr. A. Jiyad.
Petroleum Consultant, Vaksdal, Norway.

14:30 (G2) Impact of US Troops Withdrawal on Oil Operations in Iraq.

- The withdrawal of American troops from Iraq signals the adoption of a new strategy based on the creation of a regional “contractor” in the area to look after American interests.
- The absence of moderate regional political movements signals the extension of the current sectarian scene in Iraq to other parts of the region.
- Non-political, non-corrupt professional forces need to be mobilised to breathe new life into civil society and bring about a new types of politics in the region more in tune with its socio-political constituency.
- The oil industry (and other strategic industries) has been placed by these exceptional circumstances in the position of a moral guardian whose values and ethics need to be re-introduced to a political scene from which they have been totally absent.

Conclusions: The prospects for the oil industry, the economy, universities and other civic institutions.

Mr. Rabea Al-Hafidh.
Head of Arab-Turkish relations desk, Forum of Muslim Thinkers FMT
15.00-15.25 Afternoon Tea and Poster Session
Chairmen: Dr A. Fenghour

H. Petroleum Systems and Habitat (V): Western and Offshore Iraq
Chairmen: Dr. M. Al-Chalabi and Dr. T. Al-Uqaili.

15:00 (H1) New Exploration Play in the Jurassic Rocks of Western Iraq.
- Introduction.
- Geological Setting.
- Paleo-geography.
- Basin Modeling.
- Source Rocks Maturation.
- Petroleum Generation.
- Geophysical Indications.
- Oil Analysis (Biomarkers and Isotopes).
- Gas Chromatography-Mass Spectrometry.
- The Predicted Cluster.
- Najmah Formation.
- Muhaiwir Formation.
- Summary and Conclusions.

Ahmed Asker Najaf Al Ahmed.
Faculty of Science, University of Al Nahrain, Baghdad, Iraq.
15:30 (H2) Special Features of the Sandstone Reservoir Members of the Ordovician Khabour Formation of Akkas Field, Western Iraq.

Dr. Aboosh. H. AL- Hadidy.
Field Division, NOC, Kirkuk, Iraq.

16:00 (H3) Clay Mineral Diagenesis and Organic Matter Variation in the Ordovician-Silurian Shales of West Iraq.

- Introduction.
- General Stratigraphy and Paleogeography.
- Materials and Methods.
- Shale Mineralogy.
- Organic Matter.
- Interpretation.
- Conclusions.

Prof. Ali I. Al-Jubouri*1, Ellen Stolle2, Adrian Hutton3, Brian Jones3
1 Research Center for Dams & Water Resources, Mosul University, Iraq.
2 EP Research, Hoetmarer Str. 17, 59320 Ennigerloh-Westkirchen, Germany.
3 School of Earth and Environmental Sciences, Wollongong University, 2522 NSW, Australia.

16:30-17:00 Panel Discussions Chairmen Closing Remarks

- Pre-Requisites & Recommendations for Healthier Exploitation of Iraqi Energy Resources.
- Iraq Oil and Human Rights.

Dr. M.Al-Chalabi, Dr. M. Ala, Dr. A. Al-Mashadani, Dr. T. Al-Uqaili, Mr. H-J. Qader and Mr. T. Shafiq
**Standby Paper Presentations**

**SB1. Ranking the Hydrocarbon Prospectivity of Kurdistan Blocks, NE. Iraq**
- Zagros Influenced Stratigraphic Section NE. Iraq.
- Taurus Influenced Stratigraphic Section NNW Iraq.
- Source, Reservoir and Cap Rocks of the Concessions Area.
- Proven, Probable and Possible Exploration Plays of Concessions Area.
- Surface VS. Geophysical GIS and Seismic Anomalies.
- Block Ranking Parameters and Methodology.
- The Legality of Kirkuk Blocks.
- Conclusions: The Relative Exploration Potential of Blocks.

**Dr. M.W. Ibrahim**\(^1\), **Dr. W. H. Pierce**\(^2\) and **Dr. E. Rutherford**\(^2\).
\(^1\) Target Exploration, London, UK.
\(^2\) Consultant Geologists, StartExp, Cypress, Texas, USA.

**SB2. Hydrocarbon Plays of Onshore Iraq**
- Geological Framework and Petroleum Potential
- Stratigraphic Sequences and Major Un-conformities.
- Source Rocks.
- Tectonic Elements and Main Structural Style Zones.
- Review of Basin Development.
- Major Provinces.
• Main Fairways of Hydrocarbon Plays.
• Conclusions: Exploration Potential of Iraq.

Dr. M.W. Ibrahim.
Target Exploration, London, UK.

SB3. Hydrocarbon Prospectivity of Offshore Iraq
• Introduction.
• Prognosis of Probable Stratigraphic Section.
• Prognosis of Source. Reservoir and Cap Rocks.
• Projecting Proven, Probable and Possible Exploration Play Fairways.
• Geophysical and GIS Anomalies.
• Conclusions.

Dr. M.W. Ibrahim.
Target Exploration, London, UK.

SB4. Ranking the Hydrocarbon Prospectivity of the Western Desert Blocks, W. Iraq.
• New time-correlation of the Paleozoic rocks of western Iraq with adjacent areas in Saudi Arabia, Jordan and Syria.
• New tectonic framework, delineating a hitherto undefined prospective inverted Paleozoic Intracratonic Basins, a little-known Anah Graben, re-defined the Hail Arch.
• Proven and potential source, reservoir and cap rock systems.
• Modelled the thermal maturation level of the primary source rocks of the area, and calibrated the results, against published optical and geochemical source rock data.
• Delineated surface and subsurface structural areas of interest, leads, anomalies and prospects in the area.
• Identified and delineated fairways of Paleozoic and Mesozoic exploration plays.
• Evaluated in increasingly smaller seismic grid the potential of a typical E&P block, using consecutively released OEC data packages.
• Established prospectivity maps of the area and a typical block.
• Ranked the E&P potential of the 12 Western Desert Blocks.

Conclusions.

Dr. M.W. Ibrahim.
Target Exploration, London, UK.

SB5. The Need for a Healthier Exploitation of Mesopotamian Hydrocarbons for the Future of Humanity: Iraq Oil and Human Rights
• The importance of Mesopotamian Hydrocarbons for the humanity (time being and future) and its relation with the alternative energy.
• The influence of Mesopotamian Hydrocarbons to the Middle East countries and the world economies, peace, human rights.
• The Balance between Real World Market Needs of hydrocarbons and the Extinction and/or Damage of Mesopotamian, MENA and World Hydrocarbons Reserves. (The Balance between Production & Consumption).
  - The Balance Between Real Need of Hydrocarbons and Rate of Production
  - The Balance between Production and Health of Hydrocarbons Reservoirs.
  - The Balance between Real World Market Needs and the Extinction or Damage of Mesopotamian and Middle East Hydrocarbons Reserves.
  - The Balance between Hydrocarbon Consumption and Protection of the Environments.
• We have to Economise the Quantities Needed from Oil & Gas for Uses that cannot be Replaced by Alternative Energies (e.g. Solar, Wind, Water, Thermal, Nuclear ... Etc.).
• The Rights of the Hydrocarbons Producers and Hydrocarbon Consumers.
  - Producers Prices and Consumer Prices vs. Governments Taxes.
  - The Oil Export Incomes & Industrial Oil Imports (Financial Balance).
  - Technology Transfer... Know How ...etc.
• The Rights and Regulations towards Safe Exploitation of Shared Hydrocarbon Fields in MENA Countries (e.g. Iraq Shared Fields with Iran, Jordan, Kuwait, Syria and Turkey): Where, Why and How?

Dr. A. Al-Mashadani, Ph.D., D.Sc.
Chairman, Nahrain Oil Services and Chairmen of Board of Trustees, Al Rasheed University, Syria.


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Mr. Shawki Al-Khalisi.
Advisor, Arab Training Institute, Baghdad, Iraq.

SB7. The Implications of Possible Additional UN Sanctions for the Future Development of the Iranian Oil and Gas Industry.

• Introduction: A Review of Iran’s Oil and Gas Reserves.
• A Brief Survey of the Sanctions and their Consequences.
• Effects of ‘Undeclared’ Sanctions on Oil Exports.
• Natural Gas and Gasoline Imports.
• Effects of Sanctions on Iran’s Gas Production and Export Potential.
• Summary and Conclusions.

Dr. M. Ala.
Department of Earth Science and Engineering, Royal School of Mines, Imperial College, University of London, London, UK.

• Background.
• Summary of OGP Guidelines for Contracting Processes.
• Intent of OGP Guidelines.
• Generic Processes for Contractor HSE Evaluation.
• A Focused Approach to HSE Evaluation.
• How Can Contractors Professionals Achieve Best HSE Performance on Site?

Mr. Gamal Abou-Elkhair and A. Al-Haidar
Kuwait Oil Company, Ahmadi, Kuwait.

SB9. Production Optimization of an Iranian Oil Reservoir
• Introduction.
• Analysing Well Performance.
• PI Test Analysis.
• Analysing Production Conditions.
• Tubing Size Analysis.
• Nodal Analysis.
• Wellhead Performance Analysis.
• Chock Size Analysis.
• Reservoir Pressure Effect.
• Skin Effect.
• Case Studies; Well A and Well B.
• Conclusions.

Mr. Abdollah Esmaeili.
Petroleum Reservoir Engineer, National Iranian South Oil Company (NISOC), Ahwaz, Iran.

• Introduction
• Cathodic Protection
• Anti-Corrosion Treatments.
• Galvanic Corrosion.
• High Temperature Corrosion.
• Conclusions and Recommendations.

Mrs. M. Dehghani.
Petroleum Engineering Department, Islamic Azad University, Omidieh Branch, Iran.

SB11. Oil Production and Environmental Damage.
• Introduction.
• Brief Description.
• Impact of Oil Production on Rainforest.
• Impact of Offshore Oil and Gas Production and Transportation.
• Impact of Peak Oil.
Conclusions.

Mr. Abdollah Esmaeili,
National Iranian South Oil Company (NISOC), Iran.


Dr Munim Al-Rawi,
Director, Carta Energy, County Kildare, Ireland.

SB13. Hydrocarbon exploration and production in Kurdistan-Iraq: Achievements and challenges

- Background
- Exploration
  Discoveries
  Ongoing exploration
- Production
  Potential
  Realities
- Challenges
  Dilemma of current situation
  Cost consideration
  Need for integrated plan
- Conclusions

Dr. Thamir Uqaili, E&P Consultant.
Chairmen and Authors Backgrounds

POST-IPC2010 CONFERENCE FIELDTRIPS


LOCATION:
IPC 2010 will be held at the Clore Lecture Theatre Huxley Building of Imperial College, 180 Queen’s Gate, London SW7 (Building No. 13 in the attached location map). The Imperial College is located at the centre of the scientific and cultural quarter of London: The Royal School of Mines, the Geological Museum, the Royal Geographical Society, the Natural History Museum, the Science Museum, the Royal Albert-Victoria Museum, the Royal School of Art, the Royal School of Music, the Royal Albert Hall and the Royal Albert Memorial are all within 10 minutes walking distance from conference hall.

TRAVEL:
Nearest Bus stops are outside the Royal Albert Hall at Kensington High Street and nearest Tube is South Kensington Underground Station at the southern end of Exhibition Road.

ACCOMMODATION:
To book your accommodation within or outside the Imperial College campus, please visit the I.C accommodation Department website or contact the I.C. Accommodation Staff at: Tel: +44 (207) 594 9507/11 Fax: +44 (207) 594 9504/5. http://www3.imperial.ac.uk/summeraccommodation

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