## Monday, 5th June

8:30 - 9:15 Registration at "Casa de Cultura"
9:15 - 9:30 Welcome

9:30 - 12:50 Mineralogy and Petrology Session

Chairman: S.K. Sharma and A. Wang

09:30-10:00 D.C. Smith "EVALUATING THE CAPABILITIES OF AN ULTRA MOBILE RAMAN MICROSCOPE (uMRM) FOR NON-DESTRUCTIVE REMOTE IN SITU ANALYSIS OF ARCHAEOLOGICAL OBJECTS, AND OF GEOLOGICAL ROCKS, IN THE FIELD"

10:00-10:20 P.S.R. Prasad et al. "RAMAN INVESTIGATIONS ON TETRA HYDROFURAN CLATHRATES IN THE TEMPERATURE RANGE 80 TO 300 K"

10:20-10:40 M. Ostrooumov "DESTABILIZATION PHENOMENA IN VOLCANIC OPALS (MEXICO): RAMAN, IR AND XRD STUDY"

10:40-11:00 M. Perraki et al. "THE LUMINESCENT CARBON-BEARING MICROINCLUSION ENIGMA IN THE KIMI UNIT, RHODOPE, GREECE:I: RAMAN MICROSCOPIC POINT ANALYSES WITH DIFFERENT LASERS"

11:00-11:30 *Coffe Break* 

11:30-11:50 A.V. Korsakov et al. "RAMAN SPECTROSCOPY ON GRAPHITES FROM THE DIAMONDIFEROUS KYANITE GNEISSES, KOKCHETAV MASSIF, NORTHERN KAZAKHSTAN"

11:50-12:10 K. Theunissen et al. "Al2SiO5 POLYMORPHS IN TECTONITES: A CONTRIBUTION TO EXHUMATION STUDIES OF THE UHP KOKCHETAV MASSIF, KAZAKHSTAN"

12:10-12:30 C. Beny et al. "IMPACT OF WEATHERING ON THE ADVANCED ARGILLIC ALTERATION OF BREZNIK IN BULGARIA – RAMAN SPECTROMETRY ON MINERALS OF ALUNITE SUPERGROUP"

12:30-12:50 J. Jehlička et al. "RAMAN SPECTRA OF ORGANIC COMPOUNDS KLADNOITE (C6H4(CO)2NH) AND HOELITE (C14H8O2) - RARE SUBLIMATION PRODUCTS CRYSTALLISING ON SELF-IGNITED COAL HEAPS"

13:30-15:00 Lunch at Victoria Playa Hotel

# 16:00 - 18:50 Earth and Planetary Sciences, Astrobiology & Extremophiles Session Part I

Chairman: D. Smith and J. Popp

16:00-16:30 A. Wang et al. "UNDERSTANDING THE SULFATES ON MARS FROM MISSION DATA AND RAMAN EXPERIMENTS"

16:30-16:50 J. Martínez-Frías et al. "A MULTI-ANALYTICAL APPROACH TO THE STUDY OF THE IRON (OXY)HYDROXYSULPHATE TERRACED BIOCONSTRUCTIONS OF THE TINTILLO ACIDIC RIVER (RIO TINTO AREA, IBERIAN PYRITE BELT, SPAIN)"

16:50-17:10 C.P. Marshall et al. "RESONANCE RAMAN SPECTROSCOPY OF HALOPHILIC ARCHAEA CAROTENOIDS"

17:10-17:50 *Coffe Break* 

17:50-18:10 K. Yilmaz et al. "RAMAN SPECTROSCOPIC STUDY OF EXTREMOPHILES IN HYDROTHERMAL MICROBIAL COMMUNITIES"

18:10-18:30 H.G.M. Edwards "RAMAN SPECTROSCOPY OF EXTREMOPHILES FROM HOT AND COLD DESERTS : AN ASTROBIOLOGICAL JOURNEY FROM MARS OASIS , ANTARCTICA , TO PLANET MARS"

18:30-18:50 S.K. Sharma et al. "COMBINED REMOTE LIBS AND RAMAN SPECTROSCOPY OF MINERALS COATED WITH HEMATITE AND COVERED WITH BASALTIC DUST AT 8.6 m"

**19:00 – 19:30** Opening Ceremony

**20:00** Official Reception at "Palacio de la Najarra" offered by the City Hall.

# Tuesday, 6th June

# 9:00 - 10:10 Earth and Planetary Sciences, Astrobiology & Extremophiles Session Part II

Chairman: H.G.M. Edwards and J.M. Madariaga

09:00-09:30 J. Jehlička et al. "RAMAN SPECTRA OF ORGANIC MINERALS - POSSIBLE IMPLICATIONS FOR EXOBIOLOGY?"

09:30-09:50 S.E. Jorge Villar et al. "RAMAN SPECTROSCOPY OF EXTREMOPHILES FROM ARCTIC COLD DESERTS"

09:50-10:10 P. Sobrón et al. "MODELING TINTO RIVER (SPAIN)
HYDROGEOCHEMISTRY. I.
DIFFUSION OF MOLECULAR SPECIES IN THE SYSTEM SULFURIC
ACID-WATER BY RAMAN SPECTROSCOPY"

## 10:20 - 12:40 Art and Archaelogy Session

Chairman: P. Vandenabelee and C. Beny

10:20-10:50 P. Vandenabeele et al. "IN SITU ART INVESTIGATION WITH MOBILE RAMAN SPECTROSCOPY"

- 10:50-11:10 M. Maguregi et al. "In-Situ NON DESTRUCTIVE IDENTIFICATION OF NITRATE DECAYING COMPOUNDS IN CULTURAL HERITAGE MATERIALS BY MEANS OF PORTABLE MICRO-RAMAN"
- 11:10-11:40 *Coffe Break*
- 11:40-12:00 M. Pérez Alonso et al. "DEGRADATION MECHANISMS BY PORTABLE RAMAN SPECTROSCOPY AND THERMODYNAMIC SPECIATION: MALACHITE DECAY IN WALL PAINTINGS"
- 12:00-12:20 E.A. Carter et al. "THE DYNAMICS OF BONE FOSSILISATION: A MICRO-SCALE INVESTIGATION OF RARE EARTH ELEMENT UPTAKE, ORGANIC CONTENT AND MINERAL RECRYSTALLISATION"
- 12:20-12:40 M. Breitman et al. "EXPERIMENTAL PROBLEMS IN RAMAN SPECTROSCOPY APPLIED TO PIGMENTS IDENTIFICATION IN MIXTURES"
- 13:30-15:00 Lunch at Victoria Playa Hotel

#### 15:45 - 19:25 Instrumentation Session

Chairman: F. Rull and J. Dubessy

- 15:45-16:15 S.K. Sharma "NEW TRENDS IN TELESCOPIC AND CONFOCAL MICRO-RAMAN SPECTROSCOPIC INSTRUMENTATION"
- 16:15-16:35 H. Thiele et al. "FIBER COUPLED SCANNING RAMAN MICROSCOPE WITH UV EXCITATION FOR IN-SITU PLANETARY INVESTIGATION"
- 16:35-16:55 S.E. Jorge Villar et al. "REQUIREMENTS FOR MINIATURISED RAMAN SPECTROMETER FOR PLANETARY EXPLORATION"
- 16:55-17:15 S.K. Sharma et al. "TIME-GATED REMOTE RAMAN SPECTROSCOPY OF INORGANIC AND ORGANIC MATERIALS TO A RADIAL DISTANCE OF 100 M"
- 17:15-17:45 *Coffe Break*
- 17:45-18:05 M. Nurul Abedin et al. "REMOTE RAMAN INVESTIGATION OF MIXED MINERALS"
- 18:05-18:25 G. Bazalgette et al et al. "COMBINED RAMAN SPECTROMETER/LASER-INDUCED BREAKDOWN SPECTROMETER DESIGN CONCEPT"
- 18:25-18:45 Iberlaser: A. Sainz "RAMAN SPECTROSCOPY BASED ON ECHELLE GRATINGS"
- 18:45-19:05 Horiba Jovin Ibon
- 19:05-19:25 Bruker: J. Sawatzkia et al. "RAMAN MICROSCOPY FROM 1064NM TO 532NM USING ONE SYSTEM."

#### **20:00** Official Reception at "Hotel Victoria" offered by the Organizing Committee.

## Wednesday, 7th June

### 8:45 - 12:00 Forensic Sciences. Environmental & Geosiences

Chairman: J. Jehlička and J. Medina

- 08:45-09:15 C. Cailteau el al. "IN SITU MONITORING OF GAS EMISSION FROM ROCKS BY RAMAN SPECTROSCOPY EXPERIMENTAL SYSTEM, FIRST RESULTS AND PERSPECTIVES"
- 09:15-09:45 H.G.M. Edwards "APPLICATION OF RAMAN SPECTROSCOPY AT LONGER WAVELENGTHS TO FORENSIC ANALYSIS"
- 09:45-10:15 J. Popp el al. "ADVANCES OF UV RAMAN SPECTROSCOPY IN LIFE SCIENCES"
- 10:15-10:40 *Coffe Break*
- 10:40-11:00 E.C. Perez el al. "RAMAN SPECTROSCOPY OF c.3.5 BILLION-YEAR-OLD ORGANIC MATTER"
- 11:00-11:20 V.G. Baonza el al. "RAMAN SPECTROSCOPY IN GEM ANVIL CELLS: PRESSURE-INDUCED STRUCTURAL CHANGES IN WATER DEDUCED FROM VIBRATIONAL SPECTRA"
- 11:20-11:40 F. Rull el al. "RAMAN SPECTROSCOPIC "IN-SITU" STUDY OF THE REACTIONS OF HYDRATATION AND CARBONATION OF CALCIUM OXIDE"
- 11:40-12:00 D.C. Smith et al. "A COMBINED RAMAN AND FTIR SPECTROPHOTOMETRIC STUDY OF THE GREEN DIAMOND FROM THE DIAMONDIFEROUS ALLUVIAL SANDS AT PASVIK VALLEY, FINNMARK, NORWAY"

  J.C. Vrijmoed et al. "MICRODIAMOND (IN SITU) IN THE SVARTBERGET PERIDOTITE, VESTLANDET, NORWAY, CONFIRMED BY RAMAN MICROSCOPY"

### 12:00 - 13:00 Posters Session and Open discussion.

All posters will be displayed from Monday to Wednesday at the Meeting.

**13:00 – 13:30** Closing Ceremony

14:00 Conference Lunch at "Casa Paco"