









3rd International Workshop on Induced Polarization



6 – 9 April 2014 Ile d'Oléron, Charente-Maritime, France

final circular

1/ Objectives

While originally developed for prospection and characterization of mineral deposits purposes, the recent developments of Induced Polarization (IP) geophysical methods in terms of instrumentation, processes understanding at micro-scale for low frequencies (< 1000 Hz) or macroscopic modeling and inversion processes are very promising for environmental low-polarizable targets study. Promising applications of the IP method are particularly seen in hydrogeophysics, biogeophysics or characterization of contaminated sites.

Two previous workshops had already taken place entitled 'International Workshop on Induced Polarization in Near-Surface Geophysics'. The first one held in Bonn, Germany in 2009, and the second one in Golden, Colorado, USA in 2011. The aim of the first workshop was to present last developments and applications of the method for near surface hydrogeological and environmental investigations. The goal of the second workshop was to focus on the understanding of the mechanisms generating IP signals in the earth. These workshops had also dealt with data acquisition, petrophysical relationships, theory and laboratory studies, inverse modelling and imaging, or with

environmental, hydrological or engineering applications.

The aim of this third workshop is twofold: (i) discuss the recent developments of the method for the geophysicist community, and (ii) open the discussion with other scientific communities (e.g., medical imaging, biological) using the same physical processes even if with other names (e.g., AC impedance spectroscopy, low-frequency dielectric spectroscopy).

The particularity of this workshop is that classical scientific sessions will be completed with working groups.

Four sessions will be organized:

S1: IP Petrophysics

S2: IP Methodology

S3: IP for geophysical case studies

S4: Other IP applications

Four parallel Working Groups will be organized on the following topics:

WG1: advances and prospects in IP inversion WG2: advances and prospects in laboratory measurements

WG3: advances and prospects in field measurements

WG4: good practice for TDIP and SIP

http://ip.geosciences.mines-paristech.fr/

2/ Organized by

Université Pierre-et-Marie Curie - Paris VI Institut Polytechnique de Bordeaux Mines ParisTech Centre National de la Recherche Scientifique

3/ Sponsored by

Areva

4/ Organizing Committee

C. Camerlynck (UPMC)

H. Chauris (MINES ParisTech)

A. Maineult (CNRS-UPMC)

M. Schmutz (IPB-ENSEGID)

5/ Scientific Committee

N. Carlson (Zonge International Inc., USA)

C. Doussan (INRA, France)

N. Florsch (UPMC, France)

A. Kemna (Univ. Bonn, Germany)

J. Macnae (RMIT University, Australia)

T. Martin (BGR, Berlin, Germany)

K. Titov (St Petersburg State Univ., Russia)

A. Weller (Tech. Univ. Clausthal, Germany)

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6/ Agenda

Registration from 16:00, Sunday April 6th.

Monday April 7th

8:30-9:00 General introduction

9:00-11:15 S1 – IP Petrophysics (chairmen: N. Florsch, J. Macnae)

11:30-12:30 Working Groups (WG): presentation of the topics

14:00-15:45 S2 - IP methodology (chairmen: N. Carlson, A. Weller) 15:45-16:45 Posters for S1

Tuesday April 8th

8:30-9:30 Keynote lecture by T. Martin

9:30-12:30 WG: discussions by groups

14:00-16:30 Field IP demonstration

17:00-18:00 Posters for S2

Wednesday April 9th

8:30-10:30 S3 - IP for geophysical case studies (chairmen: A. Kemna, K. Titov)

10:30-11:30 Posters for S3

11:30-12:30 Preparation of the WG synthesis

13:30-14:45 S4 - Other IP applications (chairmen: C. Doussan, T. Martin)

14:45-15:45 Presentation of the WG synthesis

15:45-16:00 Closure

7/ Venue

Closest train station (70 km): La Rochelle

Shuttle between La Rochelle train station and conference center:

- from La Rochelle train station to Oleron : departure April 6th at 19h00
- from Oleron to La Rochelle train station : departure April 9th at 16h30

Train transportation: http://en.voyages-sncf.com/

Detailed information about symposium center, available at:

http://www.caes.cnrs.fr/vv/oleron/index.html

