

## SECOND CIRCULAR

International Subcommittee on Devonian Stratigraphy (SDS)  
 International Subcommittee on Carboniferous Stratigraphy (SCS)  
 IGCP 596 on “Climate Change and Biodiversity patterns in the Mid-Paleozoic”  
 Institut Scientifique, Mohammed V University– Agdal, Rabat

### International Field Symposium

### “The Devonian and Lower Carboniferous of northern Gondwana”

in memory of Dr. Volker EBBIGHAUSEN

**22<sup>nd</sup> – 29<sup>th</sup> March 2013**



An international meeting hosted by SDS, SCS, IGCP 596, the Institut Scientifique (Mohammed V University-Agdal), Rabat, and the D/C Boundary Task Group will take place in the Tafilalt/Maider areas (eastern Anti-Atlas, Morocco) in late March of 2013. It is devoted to the richly fossiliferous Devonian and Lower Carboniferous of the region, with some focus on the boundary between both systems. The normal weather in March will be ca. 25-30° C during the day. The field symposium will come as a complete package of conference fees, accommodation, food and field transportation (4-wheel drive). The Erfoud region has become a significant tourist destination in the last decade and is not only famous for its fossils but also for the dunes of Merzouga and desert sporting activities.

#### Organization

Institute Scientifique, Mohammed V University, Agdal, Rabat, Morocco  
 Institute of Geology and Palaeontology, Westphalian Wilhelms University Münster, Germany  
 UNESCO IGCP 596 on “Climate Change and Biodiversity patterns in the Mid-Paleozoic”  
 IUGS, International Subcommittee on Devonian Stratigraphy (SDS)

IUGS, International Subcommission on Carboniferous Stratigraphy (SCS)  
Task Group Devonian-Carboniferous Boundary

### Co-Sponsors

UNESCO Young Scientist Initiative Program

### Organizing Committee

|                             |  |
|-----------------------------|--|
| Prof. Dr. Ahmed EL HASSANI  | Institute Scientifique, Rabat, <i>Chairman</i>                         |
| Prof. Dr. Abdelfatah TAHIRI | Institute Scientifique, Rabat  |
| Prof. Dr. R. Thomas BECKER  | WWU Münster, Germany   |
| Prof. Dr. Lahcen BAIDDER    | University Hassan II, Casablanca                                       |
| Dr. Peter KÖNIGSHOF         | Senckenberg Forschungsinstitut und Naturkundemuseum,<br>Frankfurt a.M. |
| Dr. habil. Dieter KORN      | Museum für Naturkunde, Humboldt University, Berlin                     |
| Dr. Z. Sarah ABOUSSALAM     | WWU Münster, Germany   |
| Dr. Markus ARETZ            | Université Paul Sabatier, Toulouse                                     |

### Symposium Topics:

- A – The impact of Mid-Paleozoic climate on evolution and palaeodiversity
- B – Devonian chronostratigraphy – revisions, updates and regional correlations
- C – The Devonian and Lower Carboniferous of North Africa
- D – Revision of the Devonian / Carboniferous boundary
- E – Open Session (Devonian/Lower Carboniferous)

### Venue and Program

One-day meeting with talks and poster contributions will be held in the Palm-Hotel Erfoud, Tafilalt area (NE Anti-Atlas, southern Morocco), where participants will be housed. The English talks will be embedded in field trips to the Devonian and Lower Carboniferous of the Tafilalt and Maider. Additional talks, the Annual Business Meeting of SDS, and discussion rounds of IGCP 596 and the D/C Boundary Task Group will take place in the evenings. It is planned to show sections that have not been demonstrated during previous meetings and excursions. They will include:

1. A complete traverse through the Devonian, from the top Silurian to the uppermost Famennian
2. A sequence of Lower Carboniferous outcrops
3. Devonian/Carboniferous boundary sections of different facies settings
4. Sections with a focus on the climatically induced/influenced Devonian to Lower Carboniferous event succession

The conference room will be equipped for PowerPoint presentations and will have an overhead projector. Conference language is English. Poster presentations are encouraged in order to keep a tight schedule. Special time for poster presentation will be provided.

### Itinerary

#### March 22<sup>nd</sup> : Arrival

Arrival at Ouarzazate, stay there for the night (hotel will be specified in the final programme). There are cheap daily morning flights from Agadir and evening flights from Casablanca International

Airport. As an alternative you can use the Lexus buses leaving from Agadir, Marrakesch, Fes, or Rabat.

**March 23<sup>th</sup>** : The boundary between stable and Variscan Gondwana

*Guides: R. T. Becker (with data from Münster research students) and L. Baidder*

-- Drive from Ouarzazate towards the Tinerhir region.

-- Examination of the southern margin of the Variscan orogenic front S of Jebel Tisdafine, with reworked fossiliferous Lower to Middle Devonian re-deposited in Viséan conglomerates/breccias or olistolites.

-- Drive to the Tindjad region, with examination of the autochthonous Devonian at Oued Ferkla.

-- Drive in the late afternoon to the Tafilalt area.

-- Evening: Introduction to the geology of the Tafilalt/Maider region, opening of Poster sessions.

**March 24<sup>th</sup>** : Overview of the Devonian at the western margin of the Tafilalt Basin

*Guides: R. T. Becker, A. El Hassani, S. Hartenfels and L. Baidder*

Complete Devonian traverse at El Khraouia in the NE corner of the Amessoui Syncline (southern Tafilalt). The section ranges from the basal Lochkovian *Scyphocrinites* Limestone to the argillaceous upper/uppermost Famennian with clymeniids. Some focus lies on the Pragian-Emsian transition, the Eifelian change from stable platform to turbiditic basin, Kacak, *pumilio* and Taghanic Events, and the Frasnian-Famennian boundary interval in a thick basinal setting.

Evening: Option to visit the local fossil “Museum” that also has an extensive fossil shop.

**March 25<sup>th</sup> : Symposium**

Morning and afternoon: Oral and poster presentations in the hotel

Evening: **SDS Business Meeting**

**March 26<sup>th</sup>** : Devonian to Lower Carboniferous of the Amessoui Syncline (southern Tafilalt Plattform)

*Guides: C. Klug, Z. S. Aboussalam, R. T. Becker and S. Hartenfels.*

-- Lower Devonian to Eifelian section in condensed platform facies

-- Middle to Upper Devonian at Oum el Jerane, with some focus on coral biostromes, the Taghanic Event in a neritic setting, Upper Givetian goniatite shales, shallow-water Frasnian to lower Famennian, and the upper Famennian Dasberg Event.

-- The Devonian-Carboniferous transition at El Atrous, starting in the middle Famennian, with thick topmost Devonian siliciclastics and ending with deep-water Middle Tournaisian shales.

-- Famennian of the Jebel Ouaoufilal region (eastern Amessoui Syncline), with isolated slabs of the *Annulata* Event interval, very rich ammonoid fauna of the Dasberg Event interval, and thick siliciclastics around the D/C boundary.

-- (Optional) the Upper Tournaisian at “Bouhamed”

Evening: **Discussion of the IGCP 596 and the D/C boundary task Group.**

**March 27<sup>th</sup>** : Lower Carboniferous of the SE Tafilalt

*Guides: D. Korn, M. Aretz, and A. Tahiri.*

Pelagic Lower Carboniferous with ammonoids, alternating with crinoidal or microbialithic limestones and mudmounds with neritic faunas, such as sponges, corals, and brachiopods.

**March 28<sup>th</sup>** : Upper Devonian to Lower Carboniferous of the Maider

*Guides: D. Korn, R. T. Becker, Z. S. Aboussalam and S. Hartenfels,*

-- The “Stockum level” at Lalla Mimouna (*D. Korn*).

- The D/C boundary section Lalla Mimouna North (*Becker, Aboussalam & Hartenfels*).
  - The uppermost Famennian to Tournaisian of the Aguelmous Syncline (*Korn et al.*).
- Evening: Option for Carboniferous presentations if the symposium programme is too full.

**March 29<sup>th</sup>:** Lower/Middle Devonian Events of the condensed western Tafilalt Platform

*Guides: R. T. Becker, Z. S. Aboussalam*

- The lower Eifelian Chotec Event at Jebel Amelane.
- Givetian/Frasnian bio- and event stratigraphy at Mdoura-East, with a focus on the Taghanic, Frasnés, Rhinestreet, and Kellwasser Events.
- The Emsian at Jebel Ihrs, with a focus on the Chebbi, Upper Zlichov and Daleje Events.

Afternoon: Drive to Ouarzazate.

Evening: Farewell Party.

### Abstracts

Abstract should not exceed two A4 pages, written in Times New Roman 11, and including references (to be formatted in the style of “Palaeo x 3”). An additional page with figures/photos is allowed. It is planned to publish the abstracts and excursion guide in the “Documents de l’Institut Scientifique” series.

The Abstracts book will be cordoned by Prof. Ahmed EL HASSANI. Please send your abstract preferably by e-mail to: [ahmed.elhassani@gmail.com](mailto:ahmed.elhassani@gmail.com)

**Deadline for sending abstracts: *December 23<sup>rd</sup> 2012.***

### Presentation of Papers :

Papers can be presented either as a talk or a poster.

Talks : 20 minutes (including time for discussion); Keynotes : 30 minutes.

Posters : All posters are most welcome. Their size, however, should not be too long so that they fit in a 120/80 cm panel. Given the restricted numbers of possible talks, contributions will be notified if their presentation is accepted as talk or poster. Special time will be reserved for the poster inspection.

### Publications:

Refereed and accepted papers will be published in a special volume of the Bulletin de l'Institut Scientifique Rabat (international indexed series):

### Fees (1): (for the complete package)

Accommodation: In spacious Double Room: 800 Euros (please specify room share)

Accommodation: In Single Room: 950 Euros

(1) This includes inscription fee, rooms, breakfast, lunch and dinner and transportation in 4WD, starting and ending in OUARZAZATE.

### Conference and accommodations:

Hotel Palm at Erfoud

web site: [www.palmotel.ma](http://www.palmotel.ma).

### Deadlines:

Abstracts: ***December 23<sup>rd</sup> 2012***

The registration fee should be sent before: ***December 23<sup>rd</sup> 2012*** (Places are limited to ca. 50 participants, based on first come first service)

The Final Programme will be sent by: **February 15<sup>th</sup> 2013**

### Bank account Number:

Transfers must be done to:

**Crédit Immobilier et Hôtelier**  
**Agence Guich Oudayas**  
*Patrimoine géologique*  
**RIB: 2308 1024 4930 4211 0156 0041**  
**swift code: CIHMMAMC**

**Important:** please send a copy of your fee transfer order (by fax or mail).

### Contact and correspondence:

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 (with a copy to: [devonian2013@gmail.com](mailto:devonian2013@gmail.com))

### Useful Information

For Visas apply to Moroccan Embassy or consular office in your country. A letter of Invitation can be sent to everyone who needs it. Most of West European and North American countries do not need a visa. Please contact: [ahmed.elhassani@gmail.com](mailto:ahmed.elhassani@gmail.com) for that.

To know where the Moroccan Embassies are situated in your country, see:

<http://www.diplomatie.ma/default.aspx> and <http://www.consulat.ma/fr/index.cfm>

More information on Morocco can be seen on:

<http://www.maroc.ma/PortailInst/An/>

<http://www.minculture.gov.ma/fr/>

<http://www.tourisme.gov.ma/>

<http://www.mincom.gov.ma/fr.html>

VERY IMPORTANT:

**ALL PARTICIPANTS SHOULD BE IN OUARZAZATE on the evening of MARCH 22<sup>nd</sup> 2013.**

Participants will be informed in time for the meeting point for the Ice Breaker party in Ouarzazate.

Access to Ouarzazate: Most participants will fly to Casablanca airport and join Ouarzazate by bus or they can fly directly to Ouarzazate airport.

Please Note:

(Departure time from Casablanca, March 22<sup>nd</sup> (22h40) to Ouarzazate (23h35)

(Departure time from Ouarzazate March 30<sup>th</sup> (05h25) to Casablanca (06h15).

**More details on: [www.royalairmaroc.com](http://www.royalairmaroc.com)**

There are No direct flights from Agadir to Ouarzazate in that period, but you can use first class busses (CTM or other buses).

Participants will be met at Ouarzazate airport if you notify the organizers.

Please check timetables on:

<http://www.oncf.ma/Pages/Horaires.aspx> (Train+Bus)

<http://www.ctm.ma> (Bus)

Timetables of planes can be seen at: <http://www.royalairmaroc.com/>

Bank and exchange: the Moroccan National Currency Unit is the Dirham (MAD). Rates: One \$ US is about 8.50 MAD and One € is about 11 MAD. Exchange facilities of the internationally convertible foreign currencies and traveler's checks are available at the Casablanca airport and most of the bank office exchange in Ouarzazate, Erfoud and at the hotel. The bank opening hours are: from 8.30 a.m. to 2.30 p.m Monday through Thursday. A few banks open also Saturday morning. All Credit cards are accepted in most hotels, shops and travel agencies.

Medical insurance: The host country doesn't take responsibility of the medical insurance of neither the participants nor their accompanying members. Therefore, it is highly recommended that participants arrange travel insurance contracts with their travel agency.

Language: The working language of the meeting is English. No simultaneous translation will be provided.

Phone: Many phone-shops exist everywhere (téléboutiques) to make calls for affordable prices and are open from 7.00am to 11.00pm. Note that the personal mobile phones can be used in most areas that we shall visit during our excursion; the network is good, even in the desert.

Roaming and Internet connection are available.

#### Contact and correspondence:

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This Circular (and forthcoming information) can be viewed on the SDS homepage:

<http://www.unica.it/sds/>

## REGISTRATION FORM

### SDS – SCS - IGCP 596 - Institute Scientifique Meeting Morocco, 2013

First name:

Surname:

Title:

Address:

(City)

(State)

(Post or Zip code)

(Country)

Phone: (office)

(home)

E-mail address:

Fax:

I register for accommodation in:

Double room (intended to share the room with:..... )

Single room

I intend to present an oral presentation:

Yes

No

Title:

I will present a poster:

Yes

No

Title:

This form should be returned with your payment (copy of scanned or faxed receipt) : **before December 23<sup>th</sup>, 2012** to:

**Prof. Dr. Ahmed ELHASSANI,**

Director

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