

Final circular

VIII International SHRIMP Workshop, 6-10 September 2016, Granada, Spain
(shrimpworkshop@ugr.es; www.ugr.es/~shrimpworkshop)

The IBERSIMS laboratory of the University of Granada and the Polish Geological Institute welcome all scientist interested in “in situ” mass spectrometry and its applications to geosciences to the VIII International SHRIMP Workshop that will be held in Granada, Spain, from 6 to 10 September 2016.

Venue:

- Faculty of Sciences and Scientific Analytical Centre (CIC, Centro de Instrumentación Científica), University of Granada

Organizing Committee:

- Fernando Bea, Pilar Montero, Jane H. Scarrow, Jose Francisco Molina, Concepción Lázaro (IBERSIMS-UGR)
- Ewa Krzeminska (PGI-NRI)

Program: at a glance

TIME	TUESDAY 6	WEDNESDAY 7	THURSDAY 8	FRIDAY 9	SATURDAY 10
9:00 AM		Session: Advances in Methods and Instrumentation		Session: Provenance Studies	Session: Data reduction advances and implementations
9:30 AM					
10:00 AM					
10:30 AM					
11:00 AM	Registration in the Hall of the Faculty of Sciences	Coffee Break		Coffee Break	Coffee Break
11:30 AM		Session: New Results in Geochronology		Session: Stable Isotopes	Open Session: Technical issues Running the SHRIMP
12:00 PM					
12:30 PM					
1:00 PM		Lunch at the Granada Center Hotel		Lunch at the Granada Center Hotel	Lunch at the Granada Center Hotel
1:30 PM			Field trip to Ronda Peridotite		
2:00 PM					
2:30 PM					
3:00 PM		Session: New Results in Geochronology		Session: Stable Isotopes	Session: Final Talks and Closing Session
3:30 PM					
4:00 PM	Registration in the Hall of the Faculty of Sciences				
4:30 PM					
5:00 PM		Posters, beer and tapas		Posters, beer and tapas	Posters, beer and tapas
5:30 PM					General meeting to decide on the venue of the next (2018) SHRIMP Workshop
6:00 PM					
6:30 PM					
7:00 PM					
7:30 PM					
8:00 PM					
8:30 PM		Guided Tapas Tour		Dinner and Flamenco Show in the Albaicin	Conference Dinner in the Gardens of the Trillo Restaurant (Albaicin)
9:00 PM			Dinner at the Las Mimbres Restaurant		
9:30 PM	Icebreaker Party at the Carmen de la Victoria.				
10:00 PM			Nocturnal Visit to the Alhambra		
10:30 PM					
11:00 PM					

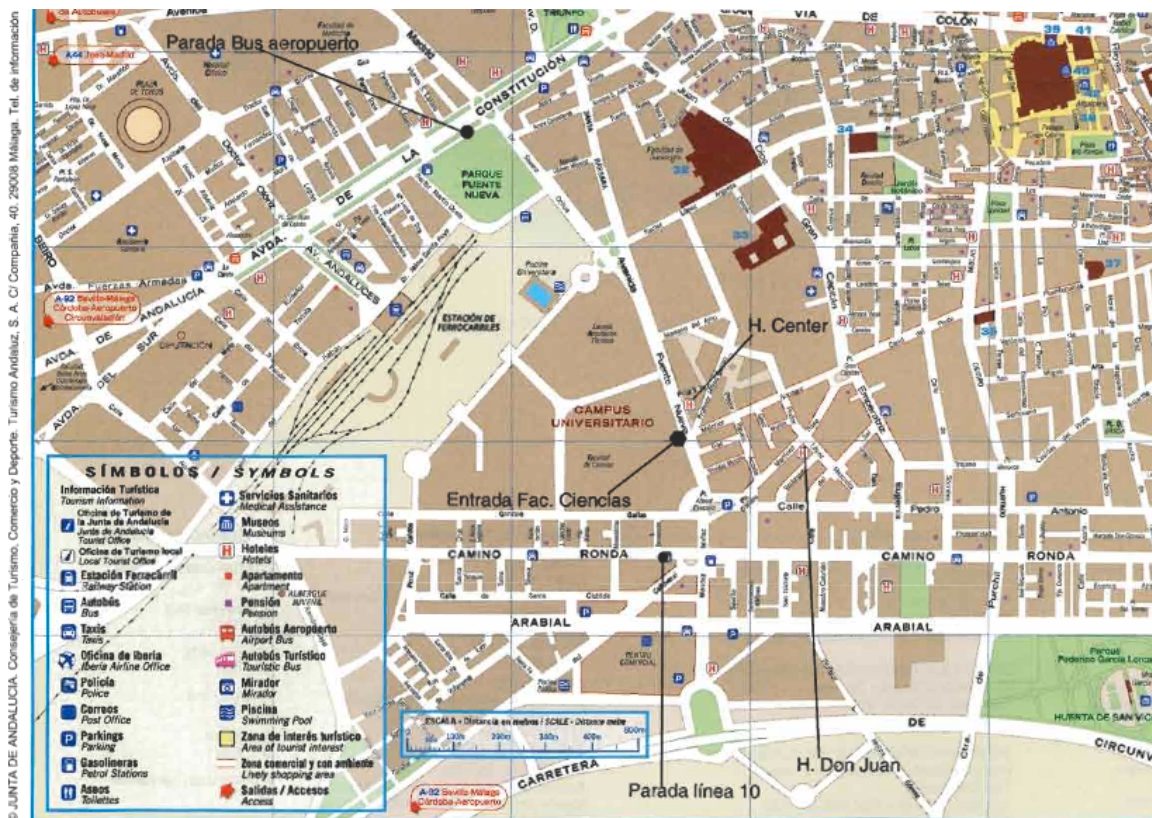
Keynotes and oral presentations:

- Keynotes duration: 30 minutes, followed by 10 minutes discussion
- Oral presentations duration: 15 minutes, followed by 5 minutes discussion
- Supported software, lecture room projector: MS PowerPoint and Apple Keynote
- Speakers may connect their iPads, iPhones or laptops directly to the projection system
- It is, however, advisable to bring a PDF copy of the presentation on a pendrive

Posters:

- Portrait format, about 1 m wide and 1.5 m high

Map of Granada city centre



GRANADA LUGARES DE INTERÉS / PLACES OF INTEREST

1 La Alhambra	9 Torres Bermejas	17 Iglesia de San Pedro y San Pablo	31 Iglesia del Salvador
2 Museo de la Alhambra	10 Museo Audiovisual "Ojo de Granada"	18 Casa de Castril - Museo Arqueológico y Etnográfico	32 Carmen Museo Max Moreau
3 Museo de Bellas Artes	11 Iglesia de San José	19 Casa del Chapiz	33 Monasterio de Santa Isabel La Real
4 Palacio y Jardines del Generalife	12 Real Chancillería	20 Palacio de los Córdova	34 Palacio de Dar al-Horra
5 Carmen de los Mártires	13 Casa de los Pisá - Museo de San Juan de Dios	21 Centro Interp. del Sacromonte	35 Hospital Real
6 Centro Cultural Manuel de Falla	14 Iglesia de Santa Ana	22 Abadía y Museo del Sacromonte	36 Monasterio de La Cartuja
7 Casa Museo Manuel de Falla	15 El Bañuelo, baños árabes	23 Ermita de San Miguel Alto	37 Basílica San Juan de Dios
8 Fundación Rodríguez Arce	16 Convento Santa Catalina de Zafra	24 Murallas del Albacín	38 Monasterio de San Jerónimo
			39 Iglesia de los Santos Justo y Pastor

Key

Entrada Fac. Ciencias - entrance to the Science Faculty

Parada Bus aeropuerto - Granada airport bus stop, NB., other airport buses stop at the main bus station, top left hand corner of the map

Map of the University of Granada Science Faculty



Key

Conference registration and venue, 1st floor

Program: detailed (the science program is a draft - please let us know if you detect any errors)

Tuesday 6th September

11.00-14.00 and 16.00-19.00
Registration in the Science Faculty

20.00
Taxis leave the Hotel Center for the icebreaker party

20.30
Ice breaker party buffet - [Carmen de la Victoria](#)

Wednesday 7th September

9.00
Welcome.
Fernando Bea

Advances in Methods and Instrumentation - chair Ewa Krzeminska

9.10
Keynote: History of SHRIMP Development - A Personal Perspective
Clement, SWJ

9.55
Data reduction beyond Excel 2003: Challenges and opportunities for the SHRIMP community
Cross, A, Bodorkos, S, Bowring, J, Main, J, Sircombe, K and Magee, C

10.20
Genetic relationship between gabbro and foidolite counterparts of the Proterozoic polyphase Gremyakh-Vyrmes massif (Kola Peninsula): accessory mineral testing
Belyatsky, BV, Lepekhina, EN, Antonov, AV, Rodionov, NV, Balashova, YuS, Sorokhtina, NV, Shevchenko, SS, and Sergeev, SA

10.45
Long-term annealing experiments of natural zircons: Inferences on the diffusion of Pb and O isotopes in inherited zircons
Bea, F

11.00 Coffee

Posters associated with this session

AMI1
TOF-SIMS Development at The Beijing SHRIMP Centre
Liu, D, Clement, S, Long, T, Bao, Z, Wang, P and Yang, Z

AMI2
Looking for a new calcite reference for SHRIMP isotope analyses: preliminary data
Czupyt, Z and Wierzbowski, H

AMI3
Kovdor pyrochlore U-Pb SHRIMP dating – some challenges and consequences
Lepekhina, EN, Antonov, AV, Belyatsky, BV, Rodionov, NV and Sergeev, SA

AMI4

Conventional mechanical crushing versus Selfrag Lab. pulverization
Takehara, M and Horie, K

AMI5

SHRIMP-TIMS comparison of zircons analysed on the Geoscience Australia SHRIMP
Magee, CW Jr, Bodorkos, S and Lewis, C

AMI6

Positive primary column, primary secondary ion operation of SHRIMP
Magee, CW Jr, Hyder, JH and Butres, R

AMI7

Metasomatic zircon growth under granulite-grade conditions: some examples
Dunkley DJ, Hiroi Y, Harlov DE, Shiraishi, K and Motoyoshi Y

AMI8

SHRIMP dating of high-Th zircons
Talavera, C, Kennedy, AK and McNaughton, NJ

New Results in Geochronology - chair Fernando Bea

11.30

Keynote: The $\delta^{18}\text{O}$ zircon isotope composition & U-Pb geochronology on SHRIMP IIe/MC
- An example from the foreland of the Variscan orogenic belt (S Poland)
Mikulski, SZ, Krzemińska E and Czupyt, Z

12.15

AMCG suite in NE Poland-subsequent datings of A-type granitoids on SHRIMP
Wiszniewska, J, Krzemińska, E, Krzemiński, L and Williams, IS

12.40

Zircon U-Pb geochronology and geochemistry of the Utsubo granitic pluton, Hida Belt, central Japan
Takehara, M, Horie, K and Williams, IS

13.05

Impact of the SHRIMP-IBERSIMS on the geological knowledge of the Western Reguibat Shield
Montero, P

13.20

Round table

13.30

Lunch

New Results in Geochronology continued - chair Concepción Lázaro

15.00

Interpretation of U-Pb SHRIMP zircon ages for the oldest metamorphic complex (Ukrainian Shield)
Berezhnaya, NG and Sergeev, SA

15.25

Age complexity in the composite Uivak Gneiss of the Saglek Block, Labrador
Sałacińska, A, Kusiak, MA, Whitehouse, MJ, Dunkley, DJ, Wilde, SA and Kielman, R

15.50

SHRIMP dating of zircon and monazite from the Archean Saglek block, Labrador
Kusiak, MA, Dunkley, DJ, Sałacińska, A, Whitehouse, MJ, Wilde, SA and Kielman R

16.15

Keynote: Geochronological Constraints on the Exhumation and Emplacement of Subcontinental Lithospheric Mantle Peridotites in the Westernmost Mediterranean
Garrido, CJ

17.00

Beer and tapas - Posters

Posters associated with this session

NRG1

Age and origin of charnockitic rocks from Luis Alves Craton, South Brazil
Basei, MAS, Bhattacharya, S Campos Neto, MC; Sato, K; Tassinari, CCG, Harara, OMM; Siga Junior, O

NRG2

Tectonic evolution of the southern boundary of Western Dharwar Craton, India: evidence from petrological and geochronological data
Miyanari, A, Das, K, Hidaka, H, Bose, S

NRG3

Volcanoes: eruptive style, pre-eruptive evolution and risk (VESPER)
Scarrow, JH, Preece, K, Chamberlain, K, Bea, F, Montero, P, Cambeses, A, Barclay, J and Brown R

NRG4

Youngest exposed granite and its geochemistry: the 0.8 Ma Kurobegawa Granite
Cambeses, A, Bea, F and Ito, H

NRG5

Diffusion-induced disturbances of the U-Th-Pb isotope system in zircon as consequence of thermal shock: a SHRIMP study in granitic enclaves hosted in SE Spanish lamproites
Cambeses, A, Montero, P, Scarrow, JH, Molina, JF, and Bea, F

NRG6

SHRIMP zircon oxygen isotope composition as indicator of mantle-crust interaction in Ossa-Morena Zone, SW Iberia, Variscan magmatism: the Burguillos del Cerro plutonic complex.
Cambeses, A, Scarrow, JH, Montero, P, Molina, JF, and Bea, F

20.30

[Tapas tour](#)

Thursday 10th September

Field trip to the Ronda peridotite

Departure from Hotel Center at 9.00, return 18.00. A picnic lunch will be provided.

20.30

Dinner at [La Mimbres](#) and night visit to the [Alhambra](#)

Friday 9th September

Provenance studies - chair Aitor Cambeses

9.00

Rutile U/Pb geochronology and geochemistry by SHRIMP: some observations
McNaughton, NJ, Talavera, C, Porter, JK, Evans, NJ and McInnes, BIA

9.25

The oxygen isotope record of detrital zircon grains from Late Svecofennian metasediments on Fennoscandia-Sarmatia stream as a supplement to the provenance studies.

Krzeminska, E, Wiszniewska, J and Czupyt, Z

9.50

Sources of the youngest (15 - 20 ka) loess in Poland as determined from detrital zircon data.

Nawrocki, J, Pańczyk, M

10.15

Zircon U-Pb age and Hf isotope evidence for provenance change and basin inversion of the Gyeongsang Basin, SE Korea

Lee, T-H, Park K-H and Keewook Y

10.40

Sedimentary provenance of the southern Paraná Basin based on U-Pb geochronology, and O and Hf isotopes on detrital zircons

Canile, FM, Babinski, M, Rocha-Campos, AC and Fanning, CM

11.00

Coffee

Stable isotopes - chair José Francisco Molina Palma

11.30

Keynote: A synthesis of triple-oxygen isotope analyses on Antarctic micrometeorites

Soens, B, Goderis S, McKibbin S, Pittarello L, Van Ginneken, M, Debaille, V and Claeys, P

12.15

Single spot profiles along human enamel/dentine junction - a sensitive and high spatial resolution $\delta^{18}\text{O}$ record of the past environmental variation provided by SHRIMP IIe/MC study.

Soltysiak, A, Krzeminska, E, Czupyt, Z

12.40

Using oxygen ($\delta^{18}\text{O}$) time-series SHRIMP IIe/MC analyses of the mammalian enamel from Stajnia Cave (southern Poland) to trace a Vistulian (Weichselian, Late Pleistocene) short time climate variability.

Zarski, M, Krzeminska E and Czupyt, Z

13.05

Mineralogy of the high-latitude bryozoans from the Admiralty Bay (King George Island, South Shetland Islands), Antarctica

Hara U. and Jasionowski M.

13.20

Round table

13.30

Lunch

15.00

Boron Isotope Analysis on SHRIMP II

Williams, M, Holden, P, Rubatto, D and Magee, C

15.25

Multiple sulfur isotopes with SHRIMP-SI: analytical protocols for identification of mass-independent and mass-dependent fractionation sulfur signatures

Ávila, JN, Ireland, TR, Holden P and Lanc P

15.50

Preliminary report of stable isotope analysis with 5-head advanced multi-collector

Horie, K, Takehara, M and Magee CW

16.15

SHRIMP Stable Isotope (-SI): first results for triple-oxygen using synthetic and natural olivine, with application to meteorites and other planetary materials

McKibbin, SJ, Ávila, JN, Holden, P, Ireland, TR, Friedrichs, B, Pack, A and Claeys, Ph

16.40

Round table

17.00

Beer and tapas - Posters

Posters associated with this session

SI1

SHRIMP Ile/MC contribution to the genetic investigations of the sulfide mineralization – a case study of pyrite

Krzemińska, E, Mikulski, SZ, Czupyt, Z, Pieńkowski G, Wołkowicz S, and Wołkowicz K,

SI2

Is an inter- and intra-conodont specimen $\delta^{18}\text{O}$ variability a key to their paleoecology? Example from the Upper Devonian of the Holy Cross Mountain (Poland)

Wójcik, K, Krzemińska, E, and Czupyt, Z

20.30

Flamenco show [Templo del Flamenco](#)

Saturday 10th September

Data reduction advances and implementations - chair Fernando Bea

9.00

Keynote: Advanced Cyber Infrastructure for Geochronology as a Collaborative Endeavor:

A Decade of Progress, A Decade of Plans

Bowring, JF and McLean, NM

9.45

Community-derived uncertainty propagation and data reporting standards in LA-ICP-MS U-Pb geochronology to improve data interpretation and inter-laboratory comparison.

Horstwood, MSA and the LA-ICP-MS U-Th-Pb Network

10.10

Dissecting SQUID 2.5: The amazing innards of our data reduction package

Bodorkos, S, Magee, CW Jr., Bowring, J, Main, P, and Cross, A

10.35 POXI, POXI, and SHRIMP Software Update

Lanc, P, Holden, P, Ireland, TR and Ávila, JN

10.50
Round table

11.00
Coffee

Technical issues Running the SHRIMP - chair Pilar Montero

11.30
Keynote: Fernando Bea

12.15
First REE analyses in zircon by SHRIMP at Geosciences Institute of São Paulo University: REE diffusion from apatite inclusion inside Temora zircon
Sato, K, Tassinari, CCG, Basei, MAS, Onoe AT, Siga Junior, O

12.40 Round table, longer than usual

13.30
Lunch

Future Directions and Closing Session - chair Jane H. Scarrow

15.00
Ba Isotopic Analysis of Chondrules from the Sayama Meteorite: Application for Development of ^{135}Cs - ^{135}Ba Chronometry in the Early Solar System
Hidaka, H, Higuchi, T and Yoneda, S

15.25
SHRIMP U-Pb analysis of Hematite
Kennedy, AK, Courtney-Davies, L, Ciobanu, CL, Wade, BS, Cook, NJ, Ehrig, K, Talavera, C, Condon, D and Tapster, S

15.50
Isotope U-Pb ratio of “imperfect” baddeleyite crystals from carbonatites of the Proterozoic alkaline-ultramafic Tiksheozero massif (N Karelia, Russia)
Rodionov, NV, Belyatsky, BV, Antonov, AV, Lepekhina, EN, Balashova, YuS, Berezhnaya, NG and Sergeev, SA

16.15
Why SHRIMP IV?
Foster, JJ and Clement, SWJ

16.50
Closing remarks
Fernando Bea

17.00
Beer and tapas - General meeting to decide on the venue of the next (2018) SHRIMP Workshop

20.30
[Conference dinner at El Trillo](#)

Visa requirements

If you require a formal letter of invitation to obtain a Visa please let us know.

Participants should check their Visa requirements at the [Spanish Ministry of Foreign Affairs](#).

Please contact the Organizing Committee if you need help with this matter.

General travel and arrival information:

All the airports have cash machines.

- From Granada airport (Federico García Lorca Granada-Jaén) to the city centre there is a bus that leaves from outside the terminal building and is scheduled to connect with flights. You can purchase a ticket directly on the bus (about 3 €) there is no need to book in advance. The most convenient way to the centre, however, is by taxi (about 25€ the ride). The journey takes about 30 minutes.
- Malaga international airport (Málaga-Costa del Sol) is located about 115 km from Granada. It is well connected by bus to Granada (<https://www.alsa.es/en/home>). The journey takes about 1.5-2 hours.

Direct buses depart from Málaga airport to Granada several times a day. They leave from the stops opposite the main arrivals entrance and you can buy the ticket, cash only, for around 14 € on the bus.

Alternatively one can catch the metro to Malaga centre and a bus from the main Málaga bus station.

The metro station is across the road to the left as you leave the main terminal building. You can buy a metro ticket, using card or cash, from a machine on the right hand side as you enter the metro station, a single ticket costs around 1.75€. You need to be on the platform of the track nearest to the airport building (don't cross the tracks) and take the train 3 or 4 stops to Maria Zambrano which is the main Málaga train station. There you change to the coach to Granada, you can buy a ticket, using card or cash, from a machine in the main foyer or a kiosk, The Granada bus usually goes from platform (andén) 24, but check. It will be around 10-15€ for a single depending on the type of coach.

- Madrid international airport (Madrid Barajas Adolfo Suárez) is connected to Granada either by [airplane](#), [high-speed train \(AVE\)](#), or [bus](#).

The AVE high-speed train is very comfortable. It departs from [Atocha Train Station](#) and goes to Antequera Santa Ana, where a bus connects with Granada Station. Madrid international airport and Atocha Train Station are connected by [metro](#). The travel takes in total less than 4 hours. You do not have to worry about the Antequera-Granada bus ticket. It is included in the AVE ticket to Granada.

The bus connection can also be very comfortable if, and only if, you take the ALSA bus, EUROBUS or PREMIUM class. These are very comfortable buses. It takes about 4.5 hours from Madrid South Bus Station (known as 'Estación Sur de Autobuses', at the metro stop 'Méndez Álvaro') to Granada Bus Station. Barajas-Madrid airport and the South Bus Station are connected by metro. Other buses are not so comfortable.

Weather

The weather in Granada in September varies radically. Daytime is relatively hot with temperatures up to 30°C, whereas the nights are much colder down to 10-15°C. Therefore, it is recommended to pack for both warm and chilly conditions. It might rain, so please bring a waterproof jacket.

Social program for accompanying people

Please remember that fees for accompanying people include the same meals and social activities as for the conference participants (with the exception the coffee and beer and tapas sessions).

In addition to the conference social program we have arranged a series of activities for accompanying people.

Wednesday

University of Granada historic buildings including: the Royal Hospital main university building, the University library and the Madraza site of the Arabic mosque school.

Thursday

The field trip to Ronda can be substituted for a visit to Málaga city and the Picasso Museum. Please inform us if you would like to make this change by sending an email letting us know your name and also that of the person you are accompanying to: shrimpworkshop@ugr.es

Friday

Renaissance and Baroque Granada including: the Cathedral and Royal Chapel as well as the Carthusian Monastery.

Saturday

Albaicin and Sacromonte, two of Granada's most picturesque barrios, Arabic and Gypsy respectively.

All the activities will start from the Hotel Centre in front of the Science Faculty at 10 am. They will last approximately 2.5 hours.

Other, suggested, activities

You might want to book yourself a visit to the traditional Arabic baths, you will need to bring a swimsuit.

Also, there are plenty of opportunities for retail therapy.

Information we need from you - please send us an email to: shrimpworkshop@ugr.es

Special dietary requirements:

If you require a vegetarian or special diet please let us know.

Next, 2018, SHRIMP Workshop:

Letters of interest should be sent before 31st July.