

## INFORMAȚII PERSONALE

Marina Manea



Sexul Feminin | Data nașterii 14/06/1974 | Naționalitatea română

## POZIȚIA

Cercetator (Centro de Geociencias - UNAM); Colaborator Institutul de Astronomie al Academiei Romane; Profesor Scoala doctorala Simion Mehedinti, Universitatea Bucuresti

## EDUCAȚIE ȘI FORMARE

## 1992–1997 Inginer geofizician

Universitatea Bucuresti, Facultatea de Geologie si Geofizica, Bucuresti (România)

## 1997–1999 Master in SIG

Universitatea Tehnica de Constructii Bucuresti, Facultatea de Hidrotehnica, Bucuresti (Romania)

## 08/2001–21/10/2004 Doctor in Stiinte

Universidad Nacional Autonoma de Mexico, Instituto de Geofisica, Mexico D.F. (Mexic)

tutor: Dr. Vladimir Kostoglodov

Titlu teza: "La cordillera de Tehuantepec como un limite tectónico entre el norte de la Placa de Cocos y la Cuenca de Guatemala: estructura y origen"

## 01/2005–12/2006 Postdoctoral Scholar

Seismological Laboratory, CALTECH, Pasadena (Statele Unite ale Americii)

referinta: Dr. Mark Simons

Proiect: "Tectonic Observatory"

## EXPERIENȚA PROFESIONALĂ

## 2007–Prezent

## Cercetator titular A.T.C.

Centro de Geociencias, Universidad Nacional Autonoma de Mexico, Juriquilla, Queretaro (Mexic)

activitate didactica si de cercetare

## 01/08/2012–31/12/2016 Profesor asignatura

Facultad de Ciencias, Unidad Multidisciplinaria de Docencias e Investigacion, UNAM, Queretaro (Mexic)

Predarea cursului de "Introducere in Geodinamica" la nivel licenta in cadrul Facultatii de Stiinte, Unitatea Multidisciplinara de Docenta si Cercetare de la UNAM.

## 16/01/2017–30/09/2017 cercetator an sabatic

Institutul National de Cercetare-Dezvoltare pentru Fizica Pamantului, Magurele (România)

15/04/2017–Prezent **cercetator pe proiect**  
Institutul Astronomic al Academiei Romane

2019–Prezent **Profesor**  
Scoala Doctorala Simion Mehedinti, Facultatea de Geografie, Universitatea Bucuresti  
(România)

#### COMPETENȚE PERSONALE

Limba(i) maternă(e) română

Limbile străine	ÎNTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
engleză	C2	C2	C2	C2	C2
spaniolă	C2	C2	C2	C2	C2
franceză	A2	B1	A1	A1	A1

Niveluri: A1 și A2: Utilizator elementar - B1 și B2: Utilizator independent - C1 și C2: Utilizator experimentat  
Cadrul european comun de referință pentru limbi străine - Grila de auto-evaluare

Competențe de comunicare Interviuri televizate pe teme științifice pentru televiziunile în limba spaniolă din Statele Unite și din Mexic (Televisa, Univision, Telemundo, Canal 22, NBC, Telefutura, etc.).

Competențe organizaționale/manageriale In prezent indeplineșc mai multe funcții:  
Co-responsabil Laboratorului Național de Vizualizare Științifică Avanzada, UNAM, Mexic  
Responsabil Laborator de Geodinamica Numerica, Centro de Geociencias, UNAM, Mexic

Competențele digitale	AUTOEVALUARE				
	Procesarea informației	Comunicare	Creare de conținut	Securitate	Rezolvarea de probleme
	Utilizator experimentat				

Competențele digitale - Grilă de auto-evaluare

- Alte competențe
- Responsabil Laborator de Geodinamica Numerica
  - Corespondent Laborator National de Vizualizare Științifică Avansata (Laboratorio Nacional de Vizualizacion Cientifica Avanzada), UNAM, Mexico.
  - Responsabil cu activitatile de difuziune si diseminare din CGEO, UNAM
  - Membru in comitetul organizator al Uniunii Geofizice Mexicane (2016-2017) cu funcția de "Secretario de Educacion".
  - Editor Researcher Topic (2019-prezent): "Unusual Subduction Zones", Frontiers in Earth Science (FI 2.89)

-Revizor pentru:

- ◆ "Gondwana Research"
- ◆ "Tectonophysics"
- ◆ "Pure and applied Geophysics"
- ◆ "GEOCHEMESTRY, GEOPHYSICS, GEOSYSTEMS (G3)"
- ◆ "Geophysical Journal International"
- ◆ "Open Geosciences"
- ◆ UEFISCDI
- ◆ Comisión Nacional de Investigación Científica y Tecnológica CONICYT
- ◆ "Computer and education"
- ◆ "Revista Mexicana de Ciencias Geologicas"
- ◆ "Revista Panamericana de Geofísica"
- ◆ "Netherlands Organisation for Scientific Research" since 2014
- ◆ "DGAPA-Direccion General de Asuntos del Personal Academico", Mexico since 2007

## INFORMAȚII SUPLIMENTARE

**Citări** Pana in prezent activitatea mea de cercetare s-a concretizat prinr-un numar 37 de publicatii, dintre care 7 ca prim autor: **31 de articole ISI**, 5 lucrari DBI si un capitol de carte. In prezent pe scopus.com, **h-factor** este 18, cu un nr. de 943 de citari.

- Publicații**
- ◆ **37/** Ji, Y., Yoshioka, S., Manea, V.C., **Manea, M.**, Suenaga, N., **2019.** Subduction thermal structure, metamorphism and seismicity beneath north-central Chile, **Journal of Geodynamics**. 129, pp. 299-312(Fl=2.81)
  - ◆ **36/** **Manea, M.**, Manea, V.C., Ferrari, L., Orozco-Esquivel, T., **2019.** Delamination of sub-crustal lithosphere beneath the Isthmus of Tehuantepec, Mexico: Insights from numeric modelling , **Journal of Geodynamics**. 129, pp. 262-274(Fl=2.81)
  - ◆ **35/** Suenaga, N., Yoshioka, S., Matsumoto, T., Manea, V.C., **Manea, M.**, Ji, Y., **2019.** Subduction thermal structure, metamorphism and seismicity beneath north-central Chile, **Journal of Geophysical Research: Solid Earth**, 4, pp. 7-15,DOI 10.5719/GeoP.4/1.
  - ◆ **35/** **Manea, M.**,**2019.** Another kind of mountains: seamounts. **GEOPatterns**. 124 (7), pp. 6848-6865, <https://doi.org/10.1029/2018JB017068>(Fl=3.59)
  - ◆ **34/** Diego Melgar, Angel Ruiz-Angulo, Emmanuel Soliman Garcia, **Marina Manea**, Vlad. C. Manea, Xiaohua Xu, M. Teresa Ramirez-Herrera, Jorge Zavala-Hidalgo, Jianghui Geng, Nestor Corona, Xyoli Pérez-Campos, Enrique Cabral-Cano, Leonardo Ramirez-Guzmán, **2018.** Deep embrittlement and complete rupture of the lithosphere during the M w 8.2 Tehuantepec earthquake, **Nature Geosciences**, 11, 955-960. (Fl=13.941)
  - ◆ **33/**Ji, Y., Yoshioka, S., Manea, V.C. **Manea, M.**,Matsumoto, T., **2017.**Seismogenesis of dual subduction beneath Kanto, central Japan controlled by fluid release. **Scientific Reports**, vol. 7, no: 16864, doi:10.1038/s41598-017-16818-z.(Fl=4.259)
  - ◆ **32/**Manea, V.C., **Manea, M.**,Ferrari, L., Orozco, T., Valenzuela. R.W., Husker, A., Kostoglodov, V., **2017.**Invited Review Article: A review of the geodynamic evolution of flat slab subduction in Mexico, Peru, and Chile. **Tectonophysics**, vol 695, pp. 27-52, doi:10.1016/j.tecto.2016.11.037(Fl=2.693)
  - ◆ **31/**Ji, Y., Yoshioka, S., Manea, V.C., **Manea, M.**,and Matsumoto, T., **2017.**Three-dimensional numerical modeling of thermal regime and slab dehydration beneath Kanto and Tohoku, Japan, **J. Geophys. Res. Solid Earth**, 122, 332–353, doi:10.1002/2016JB013230.(Fl=3.35)
  - ◆ **30/****Manea, M.**, Yoshioka, S. and Manea, V.C., **2017.**Subduction of oceanic plate irregularities in South-Central Mexico and the influence on subduction seismicity. Research Center for Urban Safety and Security Kobe University, RCUSS Report no. 21, pp. 184-194. ([http://www.rcuss.kobe-u.ac.jp/publicationYear2017/pdfEach21/21\\_18.pdf](http://www.rcuss.kobe-u.ac.jp/publicationYear2017/pdfEach21/21_18.pdf))
  - ◆ **29/**Manea, V.C., Yoshioka, S. and **Manea, M.**,**2016.**Subduction dynamics and mantle tomography

beneath Japan. Research Center for Urban Safety and Security Kobe University, RCUSS Report no. 20, pp. 120-131. ([http://www.rcuss.kobe-u.ac.jp/publication/Year2016/pdfEach20/20\\_14.pdf](http://www.rcuss.kobe-u.ac.jp/publication/Year2016/pdfEach20/20_14.pdf))

- ◆ 28/Manea, V.C., Leeman, W., Gerya, T., **Manea, M.**, Zhu, G., **2014.** Subduction of fracture zones controls mantle melting and geochemical signature above slabs. *Nature Communications*, 5:5095, <http://10.1038/ncomms6095>. (FI=12.124)
- ◆ 27/Manea, V.C., **Manea, M.**, Ferrari, L., **2013.** Review Article: A Geodynamical Perspective on the Subduction of Cocos and Rivera plates beneath Mexico and Central America. *Tectonophysics*, <http://dx.doi.org/10.1016/j.tecto.2012.12.039> (FI=2.433)
- ◆ 26/Ferrari, L., Orozco-Esquivel, T., Manea, V.C., and **Manea, M.**,**2012.** Review Article: The dynamic history of the Trans-Mexican Volcanic Belt and the Mexico subduction zone, *Tectonophysics*, 522-523, p. 122-149 (FI=2.433)
- ◆ 25/Manea, V.C., **Manea, M.**, Pomeran, M., Besutiu, L., Zlagnean, L., **2012.** Computational Fluid Dynamics in Solid Earth Sciences—a HPC challenge. *Acta Universitaria*, 22(7), 32-36.
- ◆ 24/Manea, V.C., **Manea, M.**, Pomeran, M., Besutiu, L., Zlagnean, L., **2012.** A parallelized particle tracing code for CFD simulations in Earth sciences. *Acta Universitaria*, 22(5), 12-18.
- ◆ 23/Franco, A., Lasserre, C., Lyon-Caen, H., Kostoglodov, V., Molina, E., Guzman-Speziale, M., Monterosso, D., Robles, V., Figueroa, C., Amaya, W., Barrier, E., Chiquin, L., Moran, S., Flores, O., Romero, J., Santiago, J.A., **Manea, M.**, and Manea, V.C., **2012.** Fault kinematics in northern Central America and coupling along the subduction interface of the Cocos Plate, from GPS data in Chiapas (Mexico), Guatemala and El Salvador. *Geophysical Journal International*, 189, 1223-1236. (FI=2.528)
- ◆ 22/Manea, V.C., Perez-Gussinye, M., and **Manea, M.**,**2012.** Chilean flat slab subduction controlled by overriding plate thickness and trench rollback, *Geology*, v.40, no.1, pp. 35-38; doi: 10.1130/G32543.1 (FI=4.635)
- ◆ 21/Capra, L., Manea, V.C., **Manea, M.**,and Norini, G., **2011.** The importance of Digital Elevation Model resolution on granular flow simulations: a test case for Colima volcano using TITAN2D computational routine, *Natural Hazards*, vol. 59, issue 2, pp: 655-680, doi: 10.1007/s11069-01109788-6 (FI=1.901)
- ◆ 20/Manea, V.C. and **Manea, M.**,**2011.** Flat-slab thermal structure and evolution beneath Central Mexico, *Pure and Applied Geophysics*, doi: 10.1007/s00024-010-0207-9, 13pp. (FI=1.652)
- ◆ 19/**Manea, M.** and Manea, V.C., **2011.** Curie point depth estimates and correlation with subduction in Mexico, *Pure and Applied Geophysics*, doi: 10.1007/s00024-010-0238-2 (FI=1.652)
- ◆ 18/Munoz-Salinas, E., Castillo-Rodriguez, M., Manea, V.C., **Manea, M.**,Palacios, D., **2010.** On the geochronological method versus flow simulation software application for lahar risk mapping: a case study of Popocatepetl volcano, Mexico., *Geografiska Annaler Series A*, 92(3), 311-328. (FI=1.616)
- ◆ 17/Manea, V.C. and **Manea, M.**,**2010.**Advanced Computing infrastructure for Research in Geodynamics, ISUM Conference Proceedings, *Transforming Research through High Performance Computing*, Torres Martinez, M. ed. Vol. 1, ISBN: 978-607-450-348-7
- ◆ 16/**Manea, M.** and Manea, V.C., **2010.**3d Visualization for Research and Teaching in Geosciences, ISUM Conference Proceedings, *Transforming Research through High Performance Computing*, Torres Martinez, M. ed., Vol. 1, ISBN: 978-607-450-348-7
- ◆ 15/Manea, V.C. and **Manea, M.**, **2009.**Thermally induced stresses beneath the Vrancea area, *Integrated research on the intermediate depth earthquake genesis within Vrancea zone*, In Besutiu, L. (Ed.), Vergiliu Publishing House pp.172-183. ISBN 978-973-7600-59-2
- ◆ 14/Manea, V.C., **Manea, M.**,Leeman, W.P., and Schutt, D.L., **2009.**The influence of plume head-lithosphere interaction on magmatism associated with the Yellowstone hotspot track. *Journal of Volcanology and Geothermal Research*, doi: 10.1016/j.volgeores.2008.12.012 (FI=2.368)
- ◆ 13/Munoz-Salinas, E., Castillo-Rodriguez, M., Manea, V.C., **Manea, M.**,Palacios, D., **2008.**Lahar flow simulations using LAHARZ program: application for the Popocatepetl Volcano, Mexico., *Journal of Volcanology and Geothermal Research*, vol. 175, pp. 459-471, doi:10.2016/j.volgeores.2009.01.030. (FI=2.368)
- ◆ 12/**Manea, M.**, and Manea, V.C.,**2008.** On the origin of El Chichón volcano and subduction of Tehuantepec Ridge: A geodynamical perspective., *Journal of Volcanology and Geothermal Research*, vol. 175, pp. 459-471, doi:10.1016/j.volgeores.2008.02.028 (FI=2.368)
- ◆ 11/Manea, V.C., and **Manea, M.**,**2007.**Thermal models beneath Kamchatka and the Pacific plate rejuvenation from a mantle plume impact., AGU Monograph: *Volcanism and Subduction: The Kamchatka Region*, eds.: Eichelberger, J., Gordeev, E., Izbekov, P., Ruppert, N., Kasahara, M., and Lees, J., Geophysical Monograph Series 172, pp. 81-94.
- ◆ 10/Manea, V.C., **Manea, M.**,Kostoglodov, V., and Sewell, G., **2006.**Intraslab seismicity and thermal

stress in the subducted Cocos Plate beneath Central Mexico, *Tectonophysics*, vol. 420, no. 3-4, pp. 389-408 (FI=2.433)

♦ 9/Manea, V.C., and **Manea, M.**,**2006.**The origin of modern Chiapanecan volcanic arc in southern Mexico inferred from thermal models, *Volcanic hazards in Central America*, GSA, Rose, W.I., Bluth, G.J.S., Carr, M.J., Ewert, J.W., Patino, L.C., and Vallance, J.W. vol. GSA Special Paper 412, no. ch2, pp. 27-38

♦ 8/Franco Sánchez, S.I., Kostoglodov, V., Larson, K.M., Manea, V.C., **Manea, M.** and Santiago, J.A., **2005.**Propagation of the 2001-2002 silent earthquake and interplate coupling in the Oaxaca subduction zone, Mexico., *Earth Planets Space*, vol. 57, pp. 973-985 (FI=2.773)

♦ 7/**Manea, M.**, Manea, V.C., Ferrari, L., Kostoglodov, V. and, Bandy, W., **2005.** Tectonic evolution of the Tehuantepec Ridge., *Earth and Planetary Science Letters*, vol. 238, pp. 64-77 (FI=4.581)

♦ 6/**Manea, M.**, Manea, V.C., Kostoglodov, V., and Guzmán-Speziale, M., **2005.** Elastic Thickness of the Lithosphere below the Tehuantepec Ridge., *Geofísica Internacional*, vol. 44, no 2, pp. 157-168 (FI=0.41)

♦ 5/Manea, V.C., **Manea, M.**, Kostoglodov, V., and Sewell, G., **2005.** Thermal models, magma transport, and velocity estimation beneath southern Kamchatka., *Plates, Plumes and Paradigms*, GSA, Foulger, G.R., Natland, J.H., Presnall, D.C., and Anderson, D.L (eds.), GSA Special paper, 388-31, pp. 517-536

♦ 4/Manea, V.C., **Manea, M.**, Kostoglodov, V., and Sewell, G., **2005.** Thermo-mechanical model of the mantle wedge in Central Mexican subduction zone and a blob tracing approach for the magma transport, *Physics of the Earth and Planetary Interiors*, vol. 149, pp. 165-186, doi:10.1016/JPEPI2004.08.024 (FI=2.156)

♦ 3/ Manea, V.C., **Manea, M.**, Kostoglodov, V., Currie, C.A., and Sewell, G., **2004.** Thermal Structure, Coupling, and Metamorphism in the Mexican Subduction Zone beneath Guerrero, *Geophysical Journal International*, vol. 158, pp. 775-784 (FI=2.528)

♦ 2/**Manea, M.**, Manea, V.C., and Kostoglodov, V., **2003.**Sediment fill of the Middle America Trench inferred from the gravity anomalies,*Geofísica Internacional*, vol. 42, no. 4, pp. 603-612 (FI=0.41)

♦ 1/Kostoglodov, V., Bilham, R., Santiago, J.A., Manea, V.C., **Manea, M.**, and Hernandez, V., **2002.**Long-baseline fluid tiltmeter for seismotectonics studies of Mexican subduction zone, *Geofísica Internacional*, vol. 41, no. 1, pp. 11-2 (FI=0.41)

**Publicații** 124/ Marina Manea, Sara Solís Valdés, Erika Jessenia Moreno, Conferencia: SE11: Las geociencias en la sociedad: educación, difusión y divulgación, Modalidad: Presencial, Reunión Anual de la Unión Geofísica Mexicana, UGM, País: México, Tipo: Congreso, Ámbito: Nacional, octubre de 2019.

123/ Marina Manea 2019. Invited Talk, Subduction of serpentinized fracture zone and intraslab earthquakes in southern Mexico. Session: Intraslab and intraplate earthquakes. Japan Geophysical Union. Tokyo, Makuhari-Messe.

122/Shoichi Yoshioka, Yingfeng Ji, Vlad Constantin Manea, Marina Manea, Plática: Seismogenesis of Dual Subduction Beneath Kanto, Central Japan Controlled by Fluid Release, Modalidad: Presencial, AGU Fall Meeting 2018, American Geophysical Union, País: Estados Unidos de América, Tipo: Congreso, Ámbito: Internacional, diciembre de 2018.

121/Manea V.C, invitada: Slow-slips and tectonic tremors diversity in subduction zones, Modalidad: Presencial, International Joint Workshop on Slow Earthquakes 2018, Coordinating Committee of Earthquake and Volcanic Eruption Prediction Researches, ERI, the University of Tokyo, País: Japón, Tipo: Congreso, Ámbito: Internacional, septiembre de 2018.

120/ Manea V.C, invitada: Slow-slips and tectonic tremors diversity in subduction zones, Modalidad: Presencial, Chile-Japan Academic Forum 2018 in Nikko, University of Tokyo, País: Japón, Tipo: Encuentro, Ámbito: Internacional, septiembre de 2018.

119/Min Chen, Vlad Constantin Manea, Fenglin Niu, Songqiao Shawn Wei, Eric Kiser, Plática: Seismogenic Zone of Deep Intraslab Earthquakes beneath Japan Constrained by Adjoint Tomography, Modalidad: Presencial, AGU Fall Meeting 2018, American Geophysical Union, AGU, País: México, Tipo: Congreso, Ámbito: Internacional, diciembre de 2018.

118/ **Manea V.C. and Manea, M., 2018.** 3D numerical simulations of subduction and mantle flow beneath SE-Carpathians. EGU2018-11259

117/ **Manea, M. and Manea V.C., 2018.** Time-space variation of gravity anomaly associated with slab breakoff processes. EGU2018-11556

116/**Manea, M., Manea, V.C., Gerya, T., Valenzuela Wong, R., and Radulian, M., 2017.** Subduction of oceanic plate irregularities and seismicity distribution along the Mexican Subduction Zone.

EGU2017-5981.

**115/Manea, V.C., Manea, M., Ferrari, L., Orozco, M.T., Valenzuela Wong, R., Husker, A.L., Kostoglodov, V., and Ionescu, C., 2017.** A review of the geodynamic evolution of flat slab subduction in Mexico, Peru and Chile. EGU2017-5962.

**114/ Suenaga, N., Ji, Y., Yoshioka, S., Manea, M., and Manea, V.C., 2016.** Numerical simulations of temperature, dehydration, and flow fields associated with subduction of the Cocos plate, and its relation to the occurrence of interplate seismic events in southern Mexico. AGU 169525.

**113/ Manea, M., Manea, V.C., Varela, A., and Aguilar, L.A., 2016.** National Laboratory for advanced scientific visualization at UNAM: from state-of-the-art research to high-quality teaching and outreach. RAUGM - SE14 0622.

**112/ Suenaga, N., Ji, Y., Yoshioka, S., Manea, M., and Manea, V.C., 2016.** Numerical simulations of temperature, dehydration, and flow fields associated with subduction of the Cocos Plate, and its relation to the occurrence of interplate seismic events in Southern Mexico. RAUGM - SE12 0091.

**111/ Manea, V.C., Konrad-Schmolke, M., Halama, M., Manea, M., Gerya, T., Leeman, W., 2016.** Earth's water budget controlled by subduction of oceanic plates: integrated research results from coupled petrological, thermomechanical, thermodynamic and geochemical models. RAUGM - GEOQP 0635.

**110/ Manea, M., Manea, V.C., Varela, A., and Aguillar, L.A., 2016.** National Laboratory for Advanced Scientific Visualization at UNAM -Mexico. 16th International Balkan Workshop on Applied Physics.

**109/ Manea, M., and Manea V.C., 2016.** Advanced fluid mechanics numeric simulations of irregular oceanic plates subduction beneath continents. 16th International Balkan Workshop on Applied Physics.

**108/ Manea, M., Manea, V.C., and Yoshioka, S., 2016.** Subduction of oceanic plate irregularities in Mexico and Japan and the influence on large megathrust earthquakes. JpGU SIT12-P10.

**107/ Manea, M., Manea, V.C., and Varela A., 2016.** National Laboratory for Advanced Scientific Visualization at UNAM, Mexico. EGU 2016-10728.

**106/ Manea V.C., Manea, M., Gerya, R., and Valenzuela, R.W., 2016.** Subduction of the Tehuantepec oceanic fracture zone and the relationship with a seismic gap in southern Mexico. EGU2016-10669.

**105/ Manea, M., Varela Echavarria, A., Manea, V.C., 2015.** Laboratorio de Visualización Científica Avanzada (LNVCA) de la UNAM, Campus Juriquilla-Queretaro. RAUGM, 0777.

**104/ Manea, M., Manea, V.C., Ferrari, L., and Orozco-Esquivel, M.T., 2015.,** Delamination of sub-crustal lithosphere beneath the Isthmus of Tehuantepec, Mexico. EGU2015-8157.

**103/ Manea, V.C. Perez-Gussinye, M., Manea, M., 2014.** What really causes flat slab subduction? AGU, T22B-01

**102/ Manea, V.C., Leeman, W., Gerya, T., Manea, M., Zhu, G., 2014.** Subduction of fracture zones controls mantle melting and geochemical signature above slabs. RAUGM, GEOQP-0207.

**101/ Manea, M., Capra, L., Manea, V.C., 2014.** Mexican Volcanoes @nline. RAUGM, VUL-0208.

**100/ Ferrari, L., Manea, V.C., Manea, M., Orozco, M.T., 2014.** The onset and evolution of neogene flat subduction in Southern Mexico. GSA, Paper. No. 239-1.

**99/ Manea, V.C., Leeman, W., Gerya, T., Manea, M., and Zhu, G., 2014.,** Subduction of Fracture Zones control mantle melting and geochemical signature above slabs. EGU2014-8491.

**98/ Manea, V.C., Manea M., Pomeran, M., Besutiu, L., and Zlagnean, L., 2013.** A parallelized particle tracing code for massive 3D mantle flow simulations. IN23A-06. AGU Meeting of the Americas.

**97/Manea, V.C., Manea M., and Ferrari, L., 2013.** A geodynamical perspective on the subduction of Cocos and Rivera plates beneath Mexico and Central America. S32A-02. AGU Meeting of the Americas.

**96/Orozco-Esquivel, T., Ferrari, L., Manea, V.C., and Manea, M., 2013.** The onset and evolution of slab flattening in the central Trans-Mexican volcanic belt. T41A-02. AGU Meeting of the Americas.

**95/Manea, V.C., Manea M., Pomeran, M., Besutiu, L., and Zlagnean, L., 2013.** High Performance Computing: a viable solution to boost research in Earth Sciences. IN23A-01. AGU Meeting of the Americas.

**94/Manea, V.C., Manea M., and Ferrari, L., 2013.** A geodynamical perspective on the subduction of Cocos and Rivera plates beneath Mexico and Central America. EGU2013-12219, B155.

**93/Manea, V.C., Gerya, T., Manea M., Zhu, G., and Leeman, W., 2013.** Subduction of fracture

- zones. EGU2013-12192, B191.
- 92/Manea, M., Manea V.C., Capra, L., and Bonasia, R. 2013.** Volcanic hazard in Mexico: a comprehensive on-line database fro risk mitigation. EGU2013-12473, B374.
- 91/Manea, M., Manea V.C., Capra, L., and Bonasia, R. 2012.** Mexican Volcanoes @nline: an interdisciplinary approach for studying volcanoes. Cities on Volcanoes 7th.
- 90/Manea, V.C., Manea, M., Bonasia, R., and Capra, L., 2012.** Supercomputing Infrastructure for the study of Active Volcanoes in Mexico. cities on volcanoes 7th.
- 89/Manea, V.C., Manea, M., Pomeran, M., Besutiu, L., Zlagnean, L., 2012.** A Parallelized Particle Tracing Code for CFD Simulations in Earth Sciences. ISUM 2012.
- 88/ Manea, V.C., Manea, M., Pomeran, M., Besutiu, L., Zlagnean, L., 2012.** Computational Fluid Dynamics in Solid Earth Sciences – a HPC Challenge. ISUM 2012.
- 87/Manea, V.C., Manea, M., Pomeran, M., Besutiu, L. and Zlagnean, L., 2012.** High Performance Computing in Solid Earth Sciences, Geophysical Research Abstracts, vol. 14, EGU2012-12128.
- 86/Manea, V.C., Manea, M., 2012.** Geodynamic Modleing of Flat Slab subduction. The Geological Society of America, Cordilleran Section, Paper # 201586, pp. 65
- 85/ Manea, V.C. and Manea, M., 2011.** Advanced Computing and Visualization Infrastructure for Research and Teaching in Geosciences, UGM, Session SE2.
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- 81/ Manea, M., and Manea, V.C., 2011.** Curie Point depth estimates and correlation with flat-slab subduction in Mexico. EGU2011-6995
- 80/ Manea, V.C., Manea, M., 2011.** Flat-slab dehydration, non-volcanic tremors and roll-back in Central Mexico. EGU2011-7070.
- 79/ Manea, V.C., Capra, L., Manea, M., and Norini, G., 2011.** Volcanic hazard assessment in Mexico using High Performance Computing. ISUM 2011.
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- 43/Manea, M., 2007.** *Magnetic and Gravity Anomalies over the Mexican Subduction System as constraint for Geodynamic Models.* Seminario Centro de Geociencias, UNAM.
- 42/Manea, V.C., and Manea, M., 2007. *Flat-slab subduction in Central Mexico: insights from numerical models.* SOTA, Termas Puyehue, Chile.
- 41/Manea, M., and Manea, V.C., 2007.** *On the origin of El chichon volcano and subduction of Tehuantepec Ridge: a Geodynamical Perspective.* SOTA, Termas Puyehue, Chile.
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- 34/Manea, M., and Manea, V.C., 2005.** *Low temperature and high amplitude magnetic anomaly beneath Chiapas: evidence for a highly serpentinized mantle wedge,* IVth National Meeting for Earth

- Sciences, Puerto Vallarta, Jalisco, Mexico;
- 33/Manea, V.C., and Manea, M., 2005. *Pacific plate rejuvenation from plume impact in front of the Kamchatka trench: a mechanism to produce adakitic magmas for old and fast subduction zones*, IVth National Meeting for Earth Sciences, Puerto Vallarta, Jalisco, Mexico;
- 32/Manea, M., and Manea, V.C., 2005. *Serpentinized cold mantle wedge beneath southern Mexico: new insights from thermal models and magnetic anomalies*. Interdisciplinary Workshop on Earth's Mantle Composition, Structure, and Phase Transitions, Saint Malo, France.
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**7/Manea, M., Manea, V.C., and Kostoglodov, V., 2003.** *Sediment fill in the Middle America Trench inferred from gravity. Paper no. 31-12, Cordilleran Section 99th Annual 1-3, 2003, Puerto Vallarta, Jalisco*

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**4/Manea, M., Manea, V.C., and Kostoglodov, V., 2002.** *Accretionary Prism in the Mexican Subduction Zone Inferred from Gravity Modeling. Eos Trans. AGU, 83(47), Fall Meet. Suppl., Abstract T62B-1304.*

**3/Mortera-Gutierrez, C.A., Bandy, W.L., Prol-Ledesma, R.M., Canet-Miguel, C., Cruz-Ocampo, J.C., Perez-Mortera, H., Pelaez-Gaviria, J.R., Pardo-Castro, G., Serrato-Diaz, G.S., Mendoza-Cervantes, K., Rodrigues-Chavez, F., Manea, M., Manea, V.C., Urrutia-Fucugauchi, J., Molina-Cruz, A., Machain-Castillo, M.L., Arellano-Torres, E., and Flores-Ruiz, J.H., 2002.** *Evidencia batimétrica y magnética de no existencia de volcanes marinos en el talud continental del Golfo de México enfrente de la Costa de Veracruz, GEOS, UGM, 22, No.2, Abstract GEOM-02, 223; 2/Manea, V.C., Kostoglodov, V., Currie, C.A., Manea, M., and Wang, K., 2002. Temperature Models for the Mexican Subduction Zone, GEOS, UGM, 22, No.2, Abstract GET-22, 155.*

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#### Conferințe

Participare in aproape 75 de conferinte si congrese cu prezentari orale, poster si organizari de sesiuni speciale. Organizare de concursuri pe teme educative in cadrul Uniunii Geofizice Mexicane 2016 si 2017: GeoQuiz si Concurso de conocimientos  
Octombrie 2019 - RAUGM (Reunion Anual de la Union Geofisica Mexicana)  
mai 2019- JpGU( Japan Geoscience Union Meeting, Tokyo, Japan  
-23-28 Apr 2017 - European Geosciences Union - General Assembly 2017, Viena, Austria.  
- 30 Oct - 4 Nov. 2016 - Reunion Nacional de la Union Geofisica Mexicana, Puerto Vallarta, Jalisco, Mexico (organizer special session: "Las geociencias en la sociedad: educación, difusión y divulgación"; Member in the RAUGM committee: "Secretario de Educacion")  
- 7-9 Jul. 2016 - International Balkan Workshop on Applied Physics, IBWAP 2016, Constanta, Romania  
- 22-26 May 2016 - Japan Geoscience Union Meeting, Makuhari-Messe, Tokyo, Japan.  
- 12 May 2016 - Invited talk "Structure, evolution and effect of fracture zone subduction in southern Mexico" University of Kobe, Japan.  
- 28 Apr. 2016 - Invited talk "Structure, evolution and effect of fracture zone subduction in southern Mexico" University of Kyoto, Uji campus, Japan.  
- 17-22 Apr. 2016 - European Geosciences Union General Assembly 2016, Vienna, Austria.  
- 2 - 7 Nov. 2015 - Reunion Nacional de la Union Geofisica Mexicana, Puerto Vallarta, Jalisco, Mexico (organizer special session: "Las geociencias en la sociedad: educación, difusión y divulgación")

- 28 Aug. 2015 - Invited talk "Flat slab subduction: from observations to numeric modeling" University of Kobe, Japan.
- 2 - 7 Nov. 2014. Reunion Nacional de la Union Geofisica Mexicana, Puerto Vallarta, Jalisco, Mexico (organizer special session: "Las geociencias en la sociedad: educación, difusión y divulgación");
- 22 - 26 Jun. 2014 - International Supercomputing Conference 2014, Leipzig, Germany;
- 27 Apr - 2 May 2014 - European Geosciences Union General Assembly 2014, Vienna, Austria;
- 16 - 20 Jun. 2013 - International Supercomputing Conference 2013, Leipzig, Germany;
- 10 – 11 Jun. 2013 – Workshop NEMO – Numerical Modelling using high performance computing infrastructures, Bucharest, Romania;
- 14 - 17 May 2013 - American Geophysical Union, Meeting of the Americas, Cancun, Mexico;
- 7 - 12 Apr. 2013 - European Geosciences Union General Assembly 2013, Vienna, Austria;
- 19-23 de Nov. 2012 . Cities on Volcanoes, Colima, Mexico;
- 28 Oct. – 2 Nov. 2012. Reunion Nacional de la Union Geofisica Mexicana, Puerto Vallarta, Jalisco, Mexico (**chair special session SE21**: Las geociencias en la sociedad: educación, difusión y divulgación).
- 13 - 18 Mar. 2012 - 3rd International Supercomputing Conference in Mexico (ISUM 2012: Where Supercomputing Science and Technologies Meet, Guanajuato, Mexico;
- 15 Feb. 2012, Workshop COMSOL, Guadalajara, Jalisco, Mexico;
- 29 - 31 Mar. 2012, Cordilleran Section, GSA, 108th Annual Meeting, Juriquilla, Queretaro, Mexico;
- 22 - 27 Apr 2012, European Geosciences Union General Assembly 2012, Vienna, Austria;
- 6 - 11 Nov. 2011. Reunion Nacional de la Union Geofisica Mexicana, Puerto Vallarta, Jalisco, Mexico;
- 21 - 23 Sep. 2011. XXXV Reunión Nacional CIAPEM - Comité de Informática de la Administración Pública Estatal y Municipal, Michoacán 2011, Morelia, Michoacan, Mexico;
- 20 - 25 Ago. 2011. 12th International Workshop on Modeling of Mantle Convection and Lithospheric Dynamics, Dollnsee, Germany;
- 3 - 8 Apr. 2011. European Geosciences Union, General Assembly, Viena, Austria (**co-chair session GD5.1/GMPV41/SM4.5/TS6.9** Subduction zone dynamics from the surface to the lower mantle);
- 21 - 25 Mar. 2011. 2nd Congreso Internacional de Supercomputo, ISUM 2011, San Luis Potosi, Mexico;
- 13 - 17 Dec. 2010. AGU Fall Meeting, San Francisco, USA.
- 20 - 24 Sep. 2010. Instituto de Geodinamica Sabba Stefanescu, Romanian Academy, Romanía (**Invited talk**);
- 8 - 12 Ago. 2010. Meeting of the Americas, AGU Conference, Foz do Iguassu, Brasilia (**chair special sessions: T06**-"Flat slab subduction" & **S05**- "Intermediate-depth Seisicity Nests within purely Intra-Continental Environment");
- 30 May – 3 Jun. 2010. ISC'10 (International Supercomputing Conference), Hamburg, Germany;
- 1 - 7 May. 2010. European Geosciences Union, General Assembly, Viena, Austria (**co-chair session GD1**-Geodynamics);
- 1 - 6 Mar. 2010. Congreso Internacional de Supercomputo ISUM2010, Guadalajara, Mexico;
- 10 - 16 Apr. 2009. Instituto de Geodinamica Sabba Stefanescu, Romanian Academy, Romanía (**Invited talk**);
- 19 - 24 Apr. 2009. EGU, General Assembly, Vienna, Austria;
- Jun. 28 – Jul. 3, 2009. 11th International Workshop on Modeling of Mantle Convection and Lithospheric Dynamics. Braunwald, Switzerland;
- 26 - 31 Oct., 2008 - UGM, Puerto Vallarta, Mexico (**convener Special Session: SE05**: Geodynamics of the Mexican Subduction Zone: constraints from seismology, geochemistry and plate reconstruction);
- 22 - 24 Sep. 2008 - Geomod 2008, Florence, Italy;
- 13 - 18 Jul. 2008 - Goldschmidt "From Sea to Sky", Vancouver, Canada;
- 27 - 30 May 2008 - AGU, Joint Assembly, Fort Lauderdale, Florida, USA (**Convener**);
- 13 - 18 Apr. 2008 - EGU, Vienna, Austria;

- 10 - 14 Dec, 2007 - AGU, Fall Meeting, San Francisco, USA;
- 7 - 10 Nov, 2007 - Joint NSF-MARGINS and IFREE Workshop: Subduction Factory Studies in the Izu-Bonin-Mariana Arc System: Results and future plans. Waikiki Beach Marriott, Honolulu, Hawaii;
- 28 - 31 Oct, 2007 - GSA Denver Annual Meeting, Colorado Convention Centre, USA. ,
- 8 - 10 Ago, 2007 - Symposium: "La conexion Chortis-Sur de Mexico en el tiempo y en el espacio. Teatro del campus Juriquilla, Queretaro, Mexico;
- 18 - 22 Jun, 2007 - MARGINS Workshop to integrate Subduction factory and Seismogenic Zone Studies in Central America. La Condesa hotel, Heredia, Costa Rica.
- 22-25 May, 2007 - AGU, Joint Assembly, Acapulco, Mexico. (**organizer special session T32A:** "Mexican and Central American Subduction Zones: Bringing Together Seismology, Petrology, Geology, Tectonics, and Geodynamics I" ;
- 29 Jan - 2 Feb, 2007 - State of the Arc (SOTA), Termas Puyehue, Chile;
- 11 - 15 Dec, 2006. - AGU, Fall meeting, San Francisco, USA;
- 29 Oct - 3 Nov, 2006 - Reunion Nacional de la Union Geofisica Mexicana, Puerto Vallarta, (Jalisco, Mexico);
- 2 - 7 Apr 2006 - EGU General Assembly, Vienna, Austria;
- 8 - 9 Nov 2005 - Second Annual TO (Tectonics Observatory) Meeting;
- 29 Oct 2005 - First Annual MASE (MesoAmerican Subduction Experiment) Meeting;
- 30 Oct - 4 Nov, 2005 - IVth National Meeting for Earth Sciences, Puerto Vallarta, (Jalisco, Mexico), (**organizer special session:** "Geodynamics of Subduction Zones: from numerical models to seismology and potential field methods - a session in honor of Hartmut Jodicke ,
- 30 Ago - 3 Sep, 2005 - Interdisciplinary Workshop on Earth's Mantle Composition, Structure, and Phase Transitions. Saint Malo, France;
- 28 Ago - 1 Sep 2005 - AGU Chapman Conference on The Great Plume Debate: The Origin and Impact of LIPs and Hotspots, Ben Nevis Hotel, Fort William, Scotland;
- 19 - 23 Jun 2005 - Mantle Convection Workshop, Boulder, Colorado, USA;
- 24 - 29 Apr 2005 - EGU General Assembly, Vienna, Austria;
- 4 Jan 2005 - Tectonics Observatory Subduction Seminar, Caltech, Pasadena, USA
- 13 - 17 Dec, 2004, - AGU Fall Meeting, San Francisco;
- 31 Oct - 5 Nov 2004 - 4th Reunion nacional de ciencias de la Tierra, Mision Juriquilla, Queretaro, Mexico;
- 21 - 27 Ago 2004 - International Workshop on Japan-Kamchatka-Aleutian Subduction Processes – Linkages among tectonics, seimicity, magma genesis, and eruption in volcanic arcs, Petropavlovsk-Kamchatsky, Russia;
- 17 - 21 May 2004 - Joint Assembly, Montreal, Canad;
- 25 - 30 Abril 2004 - EGS - AGU - EUG Joint Assembly, Nice, France ;
- 8 - 12 Dec, 2003 - AGU Fall Meeting, San Francisco;
- 4 Dec 2003 - Seminars in Earth Sciences 2003-2004, Geology Institute, UNAM, Mexico;
- 17 - 19 Nov, 2003 - IX Congress Division of Fluid Dynamics; Mexican Physical Society, at the Institute for Petroleum Research (IMP) in Mexico City;
- 3 - 7 Nov, 2003 - Annual Meeting, UGM, Puerto Vallarta, (Jalisco, Mexico) , (oral presentation), **Convenor, Special Session:** "Thermal Structure, Metamorphism, Mantle Wedge and Tomography in Subduction Zones";
- 23 Oct 2003 - Seminar, Instituto de Geofisica, UNAM, Mexico;
- 25 - 29 Ago, 2003 - Penrose Conference; Plume IV: Beyond the Plume Hypothesis; Tests of the plume paradigm and alternatives; Hveragerdi, Iceland;
- 6 - 11 Apr 2003 - EGS - AGU - EUG Joint Assembly, Nice, France.
- 1 - 3 Apr, 2003 - The Geological Society of America, Cordilleran Section, Puerto Vallarta (Jalisco, Mexico);
- 6 - 10 Dec, 2002 - AGU Fall Meeting, San Francisco;
- 4 - 8 Nov, 2002 - IIIrd National Meeting for Earth Sciences, Puerto Vallarta, (Jalisco, Mexico);
- 15 - 20 Nov, 1998 - Japanese-Romanian Workshop on Landslide related Geohazards, Sinaia,

Romania.

#### Prezentări

- mai 2019 Prezentare invitata: Subduction of serpentinized fracture zone and intraslab earthquakes in southern Mexico, GeoScience Union Meeting, Tokyo, Japan
- octombrie 2019 - Marina Manea, Sara Solís Valdés, Erika Jessenia Moreno, organizator sesiune specială SE11: Las geociencias en la sociedad: educación, difusión y divulgación, Reunión Anual de la Unión Geofísica Mexicana, Mexico.
- 30 Oct - 4 Nov. 2016 - Reunión Nacional de la Unión Geofísica Mexicana, Puerto Vallarta, Jalisco, Mexico (organizer special session: "Las geociencias en la sociedad: educación, difusión y divulgación"; Member in the RAUGM committee: "Secretario de Educacion")
- 7-9 Jul. 2016 - International Balkan Workshop on Applied Physics, IBWAP 2016, Constanta, Romania
- 22-26 May 2016 - Japan Geoscience Union Meeting, Makuhari-Messe, Tokyo, Japan.
- 12 May 2016 - Invited talk "Structure, evolution and effect of fracture zone subduction in southern Mexico" University of Kobe, Japan.
- 28 Apr. 2016 - Invited talk "Structure, evolution and effect of fracture zone subduction in southern Mexico" University of Kyoto, Uji campus, Japan.
- 17-22 Apr. 2016 - European Geosciences Union General Assembly 2016, Vienna, Austria.
- 2 - 7 Nov. 2015 - Reunión Nacional de la Unión Geofísica Mexicana, Puerto Vallarta, Jalisco, Mexico (organizer special session: "Las geociencias en la sociedad: educación, difusión y divulgación")
- 28 Aug. 2015 - Invited talk "Flat slab subduction: from observations to numeric modeling" University of Kobe, Japan.
- 2 - 7 Nov. 2014. Reunión Nacional de la Unión Geofísica Mexicana, Puerto Vallarta, Jalisco, Mexico (organizer special session: "Las geociencias en la sociedad: educación, difusión y divulgación");
- 22 - 26 Jun. 2014 - International Supercomputing Conference 2014, Leipzig, Germany;
- 27 Apr - 2 May 2014 - European Geosciences Union General Assembly 2014, Vienna, Austria;
- 16 - 20 Jun. 2013 - International Supercomputing Conference 2013, Leipzig, Germany;
- 10 – 11 Jun. 2013 – Workshop NEMO – Numerical Modelling using high performance computing infrastructures, Bucharest, Romania;
- 14 - 17 May 2013 - American Geophysical Union, Meeting of the Americas, Cancún, Mexico;
- 7 - 12 Apr. 2013 - European Geosciences Union General Assembly 2013, Vienna, Austria;
- 19-23 de Nov. 2012 . Cities on Volcanoes, Colima, Mexico;
- 28 Oct. – 2 Nov. 2012. Reunión Nacional de la Unión Geofísica Mexicana, Puerto Vallarta, Jalisco, Mexico (**chair special session SE21**: Las geociencias en la sociedad: educación, difusión y divulgación).
- 13 - 18 Mar. 2012 - 3rd International Supercomputing Conference in Mexico (ISUM 2012: Where Supercomputing Science and Technologies Meet, Guanajuato, Mexico);
- 15 Feb. 2012, Workshop COMSOL, Guadalajara, Jalisco, Mexico;
- 29 - 31 Mar. 2012, Cordilleran Section, GSA, 108th Annual Meeting, Juriquilla, Querétaro, Mexico;
- 22 - 27 Apr 2012, European Geosciences Union General Assembly 2012, Vienna, Austria;
- 6 - 11 Nov. 2011. Reunión Nacional de la Unión Geofísica Mexicana, Puerto Vallarta, Jalisco, Mexico;
- 21 - 23 Sep. 2011. XXXV Reunión Nacional CIAPEM - Comité de Informática de la Administración Pública Estatal y Municipal, Michoacán 2011, Morelia, Michoacan, Mexico;
- 20 - 25 Ago. 2011. 12th International Workshop on Modeling of Mantle Convection and Lithospheric Dynamics, Dollnsee, Germany;
- 3 - 8 Apr. 2011. European Geosciences Union, General Assembly, Viena, Austria (**co-chair session GD5.1/GMPV41/SM4.5/TS6.9** Subduction zone dynamics from the surface to the lower mantle);
- 21 - 25 Mar. 2011. 2nd Congreso Internacional de Supercomputo, ISUM 2011, San Luis Potosí, Mexico;
- 13 - 17 Dec. 2010. AGU Fall Meeting, San Francisco, USA.
- 20 - 24 Sep. 2010. Instituto de Geodinamica Sabba Stefanescu, Romanian Academy, Romanía (**Invited talk**);

- 8 - 12 Ago. 2010. Meeting of the Americas, AGU Conference, Foz do Iguassu, Brasilia (**chair special sessions: T06**-"Flat slab subduction" & **S05**- "Intermediate-depth Seisicity Nests within purely Intra-Continental Environment";
- 30 May – 3 Jun. 2010. ISC'10 (International Supercomputing Conference), Hamburg, Germany;
- 1 - 7 May. 2010. European Geosciences Union, General Assembly, Viena, Austria (**co-chair session GD1**-Geodynamics);
- 1 - 6 Mar. 2010. Congreso Internacional de Supercomputo ISUM2010, Guadalajara, Mexico;
- 10 - 16 Apr. 2009. Instituto de Geodinamica Sabba Stefanescu, Romanian Academy, Romanía (**Invited talk**);
- 19 - 24 Apr. 2009. EGU, General Assembly, Vienna, Austria;
- Jun. 28 – Jul. 3, 2009. 11th International Workshop on Modeling of Mantle Convection and Lithospheric Dynamics. Braunwald, Switzerland;
- 26 - 31 Oct., 2008 - UGM, Puerto Vallarta, Mexico (**convener Special Session: SE05**: Geodynamics of the Mexican Subduction Zone: constraints from seismology, geochemistry and plate reconstruction);
- 22 - 24 Sep. 2008 - Geomod 2008, Florence, Italy;
- 13 - 18 Jul. 2008 - Goldschmidt "From Sea to Sky", Vancouver, Canada;
- 27 - 30 May 2008 - AGU, Joint Assembly, Fort Lauderdale, Florida, USA (**Convener**);
- 13 - 18 Apr. 2008 - EGU, Vienna, Austria;
- 10 - 14 Dec, 2007 - AGU, Fall Meeting, San Francisco, USA;
- 7 - 10 Nov, 2007 - Joint NSF-MARGINS and IFREE Workshop: Subduction Factory Studies in the Izu-Bonin-Mariana Arc System: Results and future plans. Waikiki Beach Marriott, Honolulu, Hawaii;
- 28 - 31 Oct, 2007 - GSA Denver Annual Meeting, Colorado Convention Centre, USA. ,
- 8 - 10 Ago, 2007 - Symposium: "La conexion Chortis-Sur de Mexico en el tiempo y en el espacio. Teatro del campus Juriquilla, Queretaro, Mexico;
- 18 - 22 Jun, 2007 - MARGINS Workshop to integrate Subduction factory and Seismogenic Zone Studies in Central America. La Condesa hotel, Heredia, Costa Rica.
- 22-25 May, 2007 - AGU, Joint Assembly, Acapulco, Mexico. (**organizer special session T32A**: "Mexican and Central American Subduction Zones: Bringing Together Seismology, Petrology, Geology, Tectonics, and Geodynamics I" ;
- 29 Jan - 2 Feb, 2007 - State of the Arc (SOTA), Termas Puyehue, Chile;
- 11 - 15 Dec, 2006. - AGU, Fall meeting, San Francisco, USA;
- 29 Oct - 3 Nov, 2006 - Reunion Nacional de la Union Geofísica Mexicana, Puerto Vallarta, (Jalisco, Mexico);
- 2 - 7 Apr 2006 - EGU General Assembly, Vienna, Austria;
- 8 - 9 Nov 2005 - Second Annual TO (Tectonics Observatory) Meeting;
- 29 Oct 2005 - First Annual MASE (MesoAmerican Subduction Experiment) Meeting;
- 30 Oct - 4 Nov, 2005 - IVth National Meeting for Earth Sciences, Puerto Vallarta, (Jalisco, Mexico), (**organizer special session**: "Geodynamics of Subduction Zones: from numerical models to seismology and potential field methods - a session in honor of Hartmut Jodicke ,
- 30 Ago - 3 Sep, 2005 - Interdisciplinary Workshop on Earth's Mantle Composition, Structure, and Phase Transitions. Saint Malo, France;
- 28 Ago - 1 Sep 2005 - AGU Chapman Conference on The Great Plume Debate: The Origin and Impact of LIPs and Hotspots, Ben Nevis Hotel, Fort William, Scotland;
- 19 - 23 Jun 2005 - Mantle Convection Workshop, Boulder, Colorado, USA;
- 24 - 29 Apr 2005 - EGU General Assembly, Vienna, Austria;
- 4 Jan 2005 - Tectonics Observatory Subduction Seminar, Caltech, Pasadena, USA
- 13 - 17 Dec, 2004, - AGU Fall Meeting, San Francisco;
- 31 Oct - 5 Nov 2004 - 4th Reunion nacional de ciencias de la Tierra, Mision Juriquilla, Queretaro, Mexico;
- 21 - 27 Ago 2004 - International Workshop on Japan-Kamchatka-Aleutian Subduction Processes – Linkages among tectonics, seimicity, magma genesis, and eruption in volcanic arcs, Petropavlovsk-

Kamchatsky, Russia;  
- 17 - 21 May 2004 - Joint Assembly, Montreal, Canada;  
- 25 - 30 April 2004 - EGS - AGU - EUG Joint Assembly, Nice, France ;  
- 8 - 12 Dec, 2003 - AGU Fall Meeting, San Francisco;  
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- 3 - 7 Nov, 2003 - Annual Meeting, UGM, Puerto Vallarta, (Jalisco, Mexico) , (oral presentation), **Convenor, Special Session:** "Thermal Structure, Metamorphism, Mantle Wedge and Tomography in Subduction Zones";  
- 23 Oct 2003 - Seminar, Instituto de Geofisica, UNAM, Mexico;  
- 25 - 29 Aug, 2003 - Penrose Conference; Plume IV: Beyond the Plume Hypothesis; Tests of the plume paradigm and alternatives; Hveragerdi, Iceland;  
- 6 - 11 Apr 2003 - EGS - AGU - EUG Joint Assembly, Nice, France.  
- 1 - 3 Apr, 2003 - The Geological Society of America, Cordilleran Section, Puerto Vallarta (Jalisco, Mexico);  
- 6 - 10 Dec, 2002 - AGU Fall Meeting, San Francisco;  
- 4 - 8 Nov, 2002 - IIIrd National Meeting for Earth Sciences, Puerto Vallarta, (Jalisco, Mexico);  
- 15 - 20 Nov, 1998 - Japanese-Romanian Workshop on Landslide related Geohazards, Sinaia, Romania.

**Proiecte** DIRECTOR DE PROIECT (1.) / MEMBRU (2.) IN ECHIPE DE CERCETARE PENTRU GRANTURI NATIONALE/INTERNATIONALE

**1. List of Research Grants as Project Coordinator**

- ◆ **2019-2021** ERASMUS + PROJECT 2019-1-RO01-KA107-062640
- ◆ **2019-2021** ERASMUS + PROJECT 2019-1-RO01-KA107-061900
- ◆ **2015** - Advanced Visualizacion for Scientific Data – CONACyT-253607; 2014 Call "INFR-2015-01" - PI.
- ◆ **2016-2019** - Escuela de verano en Bioinformatica evolutiva - PAPIIME - PE111016; 2015 Call -PI.
- ◆ **2013-2016** - Multidisciplinary-multiscale study for the volcanism associated to subduction in Mexico - PAPIIT-IN109613; 2012 Call, PI.
- ◆ **2011-2012** - The origin of volcanism in Southern Mexico using numerical modelling (El origen del volcanismo en el sur de México a través del modelado numérico) - CONACyT-117975; 2009 Call "Apoyo Complementario para Investigadores en proceso de Consolidación SNI-1" - PI.
- ◆ **2010-2013** - The origin of El Chichon volcano using 3D numerical modelling - PAPIIT IN115810; 2009 Call - PI.
- ◆ **2007-2010** - High Performance Computer Cluster for numerical modelling of geodynamical processes - PAPIIT INI05607; 2006 Call - PI.

**2. List of Research Grants as Partner Team Leader**

- ◆ **2017-2019** Energía geotérmica no convencional en México: un estudio interdisciplinario en la parte suroriental de la Sierra Madre Occidental
- ◆ **2015-2020** proyecto Mexico-Japón - SATREPS para Fortalecer Investigación y Respuesta a eventos Naturales: Evaluación del peligro asociado a grandes terremotos y tsunamis en las costas del Pacífico mexicano para la mitigación de desastres,
- ◆ **2016** - Subduction of oceanic plate irregularities in Mexico and Japan and the influence on large megathrust earthquakes (University of Kobe - participant)
- ◆ **2015-2020** – Mexico-Japan project - SATREPS – Evaluation of the hazard associated with megaearthquakes and tsunamis along the Mexican Pacific coast for disaster mitigation. (Solid earth and tsunami modelling - participant).
- ◆ **2015** - Construction of a 3-D fully dynamic subduction model in and around Japanese Islands (University of Kobe - participant)
- ◆ **2015-2018** - La influencia de la subducción de a zona de fractura de Tehuantepec sobre la brecha sísmica. (PAPIIT IN106315- participant)

- ◆ **2014** - National Laboratory for advanced Scientific Visualization – CONACyT 232722 – participant, Convocatoria: I0027-2014-01 - participant)
- ◆ **2011-2014** - Geodinamic modelling of Colima volcanic complex. (PAPIIT IN110412- participant)
- ◆ **2011-2014** - Structural architecture of large stratovolcanoes from the Trans Mexican Volcanic Belt and their relation with geology and volcanic hazard. (CONACyT 132265, participant)
- ◆ **2010-2013** - Cyberinfrastructure for Geodynamic studies related with the Vrancea Seimic Zone – CyberDyn (co-funded European Union research grant, Romania - participant)
- ◆ **2009-2012** - Heat-flow estimation and its relationship with slab subduction in Mexico using aeromagnetic anomalies (PAPIIT IN110709-participant)
- ◆ **2008-2011** - Numerical modeling for plate deformations in southern Mexico using a supercomputer cluster (CONACyT -participant)
- ◆ **2008-2011** - Coldef Surface deformation of the Colima Volcanic Complex and its basement (ESA-European Space Agency -participant)
- ◆ **2008-2011** - Aseismic events and nonvolcanic tremors: advanced study on the Mexican subduction (CONACyT- participant)
- ◆ **2007-2010** - Igneous petrogenesis and subduction dynamics in the incipient evolutionary stages of the Trans Mexican Volcanic Belt. (CONACyT 58373 - participant)
- ◆ **2005-2008** - Seismo-tectonics of Michoacán, Mexico: 20 year after the 19th of Septiembre, 1985 earthquake. (CONACyT 46064-T, UNAM, Mexico-participant). ;
- ◆ **2005-2007** - Seismic cycle and the crust deformation in the subduction zone, Mexico. (PAPIIT IN102105, UNAM, Mexico -participant). ;
- ◆ **2004 -2006** - Middle American Seismic Experiment (MASE)-Caltech, USA (participant);
- ◆ **2001-2004** - Seismo-tectonic study of the crust deformations related with the seismic cycle in subduction zones, Mexico (DGAPA INI104801, Mexico) ;
- ◆ **2001-2004** - Seismo-tectonic study of the Guerrero seismic gap, in Central Mexico. (CONACyT 37293-T, Mexico) ;
- ◆ **2002-2005** - Seismo-tectonic study of the western boundary between the Caribbean and North American tectonic plates. (CONACyT 36449-T) ;
- ◆ **2000-2003** - Geodetic and seismic constraints of slip rheology on the Guerrero coast of Mexico (joint cooperation UNAM, Mexico - University of Colorado, USA-participant 2001-2003) ;
- ◆ **2000-2001** - Interseismic and preseismic deformation monitoring along the Mexican Pacific coast (PAPIIT IN104599, UNAM, Mexico) ;
- ◆ **1998-2003** - Interseismic deformation monitoring in central Mexico, Guerrero, using high precision tiltmeter (CONACyT 27868-T, UNAM, Mexico- participant 2001-2003);

**Afilieri** Membru al: American Geophysical Union (AGU) (din 2002);  
Mexican Geophysical Union (UGM) (din 2001);  
European Geophysical Union (EGU) (din 2003);  
Geological Society of America (GSA) (din 2003);  
Japan Geosciences Union (JpGU) - 2016

- din 2019 - membru al "Comite Academico de Supercomputo, Coordinación de Supercómputo, Dirección General de Cómputo y de Tecnologías de Información y Comunicación, UNAM", Mexic
- ◆ **din 2017** - membru in Comisia CNADTCU, Stiintele Pamantului
  - ◆ **din 2017** - invited researcher, Institute of Astronomy, Romanian Academy
  - ◆ din 2019 - profesor scoala doctorala Simion Mehedinti, Facultatea de Geografie, Universitatea Bucuresti

**Distincții**

- ◆ **Sep-Oct 2018** - Invited researcher, University of Kobe, Japan.
- ◆ **Ian-Sep 2017** - An Sabatic, Institutul National de Cercetare Dezvoltate pentru Fizica Pamantului, Magurele, Romania.

- ◆ **Apr-June 2016** - Invited researcher, University of Kobe, Japan.
- ◆ **Ago-Sep 2015** – PASPA scholarship for research (UNAM) at University of Kobe, Japan.
- ◆ **9-Mar 2015**- Sor Juana Inez de la Cruz Medall, UNAM.
- ◆ **din 2008** - Programa de Primas al Desempeño del Personal Académico de Tiempo Completo (PRIDE), C level, UNAM.
- ◆ **din 2008** -Programa SNI, 1st level, CONACyT
- ◆ **2007-2008** - Programa de Apoyo a la Incorporación de Personal Académico (PAIPA), B level, UNAM.
- ◆ **Dec. 2006 – Dec. 2007** – PFAMU scholarship from DGAPA (Dirección General de Asuntos del Personal Académico), UNAM, Mexico.
- ◆ **Jan, 2005 - Dec. 2006** - Postdoctoral scholarship, Caltech (California Institute of Technology), Pasadena, California, EU.
- ◆ **2001-2004** - DGEP (Direccion General de Estudios de Posgrado), PhD scholarship, UNAM, Mexico.
- ◆ **Mar - Jun 2000** - ERASMUS-SOCRATES scholarship - Landslide hazard assessment using statistical methods (univariate, multivariate analysis, etc.) within a GIS software package; Salzburg University, Austria.
- ◆ **1992-1997** - Scholarship award at the University of Civil Engineering, Bucharest, Romania given by the Romanian Goverment (BSc. Student).

**Dezvoltare tehnologica****Infrastructura de Supercomputing si Vizualizare Stiintifica**

- ◆2014-prezent –National Laboratory for Advanced Scientific Visualization - Campus UNAM, Juriquilla, Querétaro, México
- ◆ Sep. 2013-Aug 2014 – construction HPVC ISIS parallel visualization system - Centro de Geociencias, Campus UNAM, Juriquilla, Querétaro, México
- ◆Din Aug. 2008 – GeoMATRIX - GEOWALL facility for advanced 3D stereo visualization - Centro de Geociencias, Campus UNAM, Juriquilla, Querétaro, México.
- ◆Din Mar. 2007 – HPCC HORUS – Supercomputing facility for subduction dynamics simulations at Centro de Geociencias, Campus UNAM, Juriquilla, Querétaro, México
- ◆Din Mar. 2007 – Computational Geodynamics Laboratory setup - Centro de Geociencias, Campus UNAM, Juriquilla, Querétaro, México  
(<http://www.geociencias.unam.mx/geodinamica>)

**Cursuri**

- |      |  |
|------|--|
| 2019 | - "Geodynamics", Postgraduate Programme, Geosciences Centre, UNAM. Semester 2020-1;  |
| 2018 | - "Geodynamics", Postgraduate Programme, Geosciences Centre, UNAM. Semester 2019-1;  |
| 2016 | - "Introduction to Geodynamics", BSc. Programme in Earth Sciences, Sciences Faculty, UNAM. Semester 2017-1.  |
| 2015 | - "Introduction to Geodynamics", BSc. Programme in Earth Sciences, Sciences Faculty, UNAM. Semester 2016-1.  |
| 2014 | - "Introduction to Geodynamics", BSc. Programme in Earth Sciences, Sciences Faculty, UNAM. Semester 2015-1.  |
| 2013 | - "Introduction to Geodynamics", BSc. Programme in Earth Sciences, Sciences Faculty, UNAM. Semester 2014-1.  |
| 2012 | - Research seminar. BSc. Programme in Technology: "Applicability of fluid mechanics in earth sciences". Applied Physics and Technology Centre, UNAM. Semesters 2012-2, 2013-1; |
|      | - "Introduction to Geodynamics", BSc. Programme in Earth Sciences, Sciences Faculty, UNAM. Semester 2013-1.  |
| 2011 |  |

- Research seminar. BSc. Programme in Technology: "Applicability of fluid mechanics in earth sciences". Applied Physics and Technology Centre, UNAM. Semesters 2012-1, 2011-2;  
- "Plate Tectonics", Postgraduate Programme, Geosciences Centre, UNAM. Semester 2012-1.  
2010  
- "Plate Tectonics", Postgraduate Programme, Geosciences Centre, UNAM. Semester 2011-1;  
- Research seminar. BSc. Programme in Technology: "Applicability of fluid mechanics in earth sciences". Applied Physics and Technology Centre, UNAM. Semesters 2010-2, 2011-1  
2009  
- "Geodynamics", Postgraduate Programme, Geosciences Centre, UNAM. Semester 2010-1;  
- "Plate Tectonics", Postgraduate Programme, Geosciences Centre, UNAM. Semester 2010-1.  
2008  
- "Processing and visualization of geophysical data with open source software", Postgraduate Programme, Geosciences Centre, UNAM. Semester 2009-1;  
- "Geodynamics", Postgraduate Programme, Geosciences Centre, UNAM. Semester 2008-2;  
- "Plate Tectonics", Postgraduate Programme, Geosciences Centre, UNAM. Semester 2009-1.
- Campanii de masuratori de teren**
- 14 – 24 Feb. 2005, GPS Campaign, Chiapas, Mexico; (a study for: Polochic - Montagua fault system and the contact between the North America and Caribbean Plates);- 28 Jan. – 10 Feb. 2004, GPS Campaign, Chiapas, Mexico; (a study for: Polochic - Montagua fault system and the contact between the North America and Caribbean Plates);
  - 7 – 21 Feb. 2003, GPS Campaign, Chiapas, Mexico; (a study for: Polochic - Montagua fault system and the contact between the North America and Caribbean Plates);
  - 11 – 25 Mar. 2002, Oceanographical campaign - Justo Sierra (UNAM): "PMAG01- Geophysical (Magnetic and Bathymetric Survey) Study for the Submarine Mountainsin the Mexican Gulf";- Ago. 2001, GPS Campaign, Chiapas, Mexico; (a study for: Polochic - Montagua fault system and the contact between the North America and Caribbean Plates);

**Relatii cu publicul**

- Interviuri TV (Earthquakes in Southern California):  
- 16 Jun 2005 (Telemundo - NBC)  
- 17 Jun 2005 (Televisa, Univisión, Canal 22),  
- 21 Jun 2005 (Telemundo, Televisa, Univisión, Canal 22)
- TV Documentary: Natural Hazards in Southern California and the San Andreas Fault:  
- 10 Oct 2005 (Telemundo- NBC)
- TV Interview (Earthquake of M7.6 - 9 Oct 2005, Balakot, Pakistan):  
- 11 Oct 2005 (NBC)
- Other TV interviews:  
- 7 Dec 2005 (Univisión)  
- 9 Dic 2005 (Telefutura)
- Articole pentru publicul larg:  
- Serendipia, Ano II, no14 (Jan-Feb 2010) - HORUS-GEOMATRIX, mancuerna virtual de la geodinamica.  
- Gaceta UNAM, 30 Jun 2011, No 4349: Geociencias desarrolla un cerebro electronico superios.  
etc.