

PERSONAL STATEMENT

Danica Jablonská is a geoscientist with experience in sedimentology, geological mapping of sedimentary successions and the analysis of interaction between tectonic and sedimentary processes. The major research interest is focused on carbonate and siliciclastic rocks, their diagenetic evolution, and their role as geofluid reservoirs. Main working skills include sedimentological analyses in field and laboratory at meso- and micro-scale; geological mapping; and 3D reconstructions of the sedimentary bodies at medium and large scale.

WORK EXPERIENCE

Feb 2021 – present **Postdoctoral Research Scholar** – “Rilevamento Geologico Relativo al Progetto Carg - Foglio 325 – Visso”

The main objective of the research is small- and large-scale mapping of the Sibillini Mts. Area with the emphasis on the 3D evolution and sedimentological characterization of the carbonates from Jurassic platform - basinal carbonates to Paleogene basinal carbonates; and the main paleo- and recent- tectonic features in the area.

Aug 2020 – Feb 2021 **Term-contract worker** on "Anello Dei Sibillini - Interconnessione Ato 3 - 4 -5", detailed geological mapping and sedimentological characterization of sedimentary rocks in the selected areas in the Marche Region for hydrogeological purposes, Italy; University of Camerino and Marche Region

Oct 2019 – March 2020 **Internship at Royal Shell**, “Carbonate diagenesis of subaerial exposures”

The analysis and assessment of the diverse effects of Sea-Level-driven subaerial exposures on carbonate strata as a function of key controlling factors for diagenetic overprinting and porosity and permeability development

Aug 2018 – July 2020 **Postdoctoral Research Scholar**, University of Camerino, Italy. Evaluation of the tectonic evolution of the Monte Gorzano area, with particular emphasis on the activity of Monti delle Laga Fault. Sedimentological interpretation of field obtained stratigraphic columns and interpretation of seismic sections, constructing balanced cross- sections, fracture analysis.

May 2017 – Present **Academic instructor** at International Geology Field Camp - George Mason University/ University of Camerino, carbonate sedimentology of platform-slope-basin depositional environments

EDUCATION

Nov 2014 – Oct 2018 **PhD in Chemical and Physical Processes on the Earth**, School of Advanced Studies, University of Camerino

Dissertation: “Tectonic and gravitational features in the near-slope basinal carbonates”.

The research project was co-sponsored by Reservoir Characterization Project, www.rechproject.com. Tutor: Prof. E. Tonducci, Co-Tutor: C. Di Celma

Nov 2011 – Oct 2014 **M.Sc. in Geoenvironmental risks and resources**, University of Camerino

Thesis: “Structural features of mass-transport deposits within basinal carbonates from southern Italy” Tutor: Prof. E. Tondi, Co-Tutor: C. Di Celma

Jul 2013 - Jun 2013 **Erasmus Placement Project**, University of Aberdeen. Tutor: I. Alsop
with emphasis on study mass-transport deposits in basinal carbonates

Sep 2008 – May 2013 **M.Sc. in Physical Geography and Geoecology**, Charles University of Prague
Thesis: “Planation surfaces in the Hrubý Jeseník Mountains”. Evaluation of the paleo-tectonic activity through distribution of the planation surfaces. Tutor: M. Křížek, PhD

Feb 2010 - Jul 2010 **Exchange student for the Erasmus Project**, University of Camerino

Oct 2004 – July 2008 **B.Sc. in Geography and Cartography**, Charles University of Prague
Thesis: “Erosional risk assessment and suspended sediment load in Olšava River basin between 1990 – 2000. Evaluation of the suspended sediment load of Olsava River with connection to the land cover and land use changes. Tutor: Z. Kliment Dr.

SHORT COURSES

20 - 24 Sep 2021 – **The role of geoscientist in the energy transition**, University of Camerino, Italy

Spring 2019 - **Sedimentary Petrology**, held by prof. J. Haynes, University of Camerino, Italy

18 - 22 Mar 2019 – **Flügel-Course: International Course on Carbonate Microfacies**, held by Alex Munnecke, Friedrich-Alexander-University of Erlangen-Nürnberg

17 - 22 Sep 2018 - **Thermometry, chronometry, barometry and fluid geochemistry in sedimentary basins** held by Marta Gasparini, University Roma 3

20-21 Oct 2017 - **High Resolution Topography and 3D Imaging I&II: Introduction to Terrestrial Laser Scanning & Introduction to Structure from Motion (SfM) Photogrammetry**, 2017 GSA short course, Seattle, WA

20 Oct 2017 – **Petrochronology**, 2017 GSA short course, Seattle, WA

5 - 6 Jun 2015 – **Short course on “The significance of soft-sediment deformation structures”**, held by Massimo Moretti, University of Bari

KEY PUBLICATIONS

Jablonská D., Pitts, A. D., Di Celma C., Volatili, T., Alsop I., Tondi E.: (2021) *3D outcrop modelling of large discordant breccia bodies in basinal carbonates of the Apulian margin, Italy* (special Issue: 3D Modelling of Carbonates: Techniques and applications at different scales and processes). *Marine and Petroleum Geology*, 123. <https://doi.org/10.1016/j.marpetgeo.2020.104732>

Jablonská, D.; Di Celma, C. N.; Alsop, G. I.; Tondi, E. (2018) *Internal architecture of mass-transport deposits in basinal carbonates: A case study from southern Italy*. DOI:10.1111/sed.12420. pg.1246-1276. In *SEDIMENTOLOGY* - ISSN:0037-0746 vol. 65

Jablonská, D., Di Celma, C., Korneva, I., Tondi, E., Alsop, I. (2016) *Mass-Transport deposits within basinal carbonates from southern Italy*. *Italian Journal of Geosciences*. Vol. 135, Issue 1, pg. 30-40.

Santini, S.; Basilici, M.; Invernizzi, C.; **Jablonská, D.**; Mazzoli, S.; Megna, A.; Pierantoni, P.P. (2021) *Controls of Radiogenic Heat and Moho Geometry on the Thermal Setting of the Marche Region (Central Italy): An Analytical 3D Geothermal Model*. *Energies* 2021, 14, 6511. <https://doi.org/10.3390/en14206511>

- Tondi, E., **Jablonská, D.**, Volatili, T., Michele, M., Mazzoli, S., Pierantoni, P.P.: (2020) *The Campotosto linkage fault zone between the 2009 and 2016 seismic sequences of central Italy: Implications for seismic hazard analysis*. GSA Bulletin, (December 2020) <https://doi.org/10.1130/B35788.1>
- Di Celma, C., Pitts, A., **Jablonská, D.**, Haynes, J.T.: (2020) *Backset lamination produced by supercritical backwash flows at the beachface-shoreface transition of a storm-dominated gravelly beach (middle Pleistocene, central Italy)* Marine and Petroleum Geology, 112, <https://doi.org/10.1016/j.marpetgeo.2019.08.015>
- Pitts, A. D., **Jablonská, D.**, Donato, V. Di, Mazzoli, S., Spina, V., Celma, C. Di, & Tondi, E. (2020). *Sedimentological and stratigraphic signature of the Plio-Pleistocene tectonic events in the Southern Apennines, Italy: The Calvella-Anzi Basin case study*. Marine and Petroleum geology, 116 (December 2019), 104-198.
- Villani, F., ... **Jablonská, D.** ... et al. – Open EMERGEO Working Group (2018) *A database of the coseismic effects following the 30 October 2016 Norcia earthquake in Central Italy*. Scientific Data Open Access. Vol. 5, 27 March 2018 DOI: 10.1038/sdata.2018.49
- Civico, R. ... **Jablonská, D.** ... et al. – Open EMERGEO Working Group (2018) *Surface ruptures following the 30 October 2016 Mw 6.5 Norcia earthquake, central Italy*. Journal of Maps Open Access Volume 14, Issue 2, 2018, pg. 151-160.
- Korneva, I., Tondi, E., **Jablonská, D.**, Di Celma, C., Alsop, I., Agosta, F. (2016) *Distinguishing tectonically- and gravity-driven synsedimentary deformation structures along the Apulian platform margin (Gargano Promontory, southern Italy)*. Marine and Petroleum Geology, Vol. 73, pg. 479-491. DOI: 10.1016/j.marpetgeo.2015.12.009

CONFERENCE CONTRIBUTIONS

Participation at scientific meetings as a speaker:

- Jablonská D.**; Volatili T.; Di Celma C.; Tondi E. (2018) Impact of gravity-driven deposits on fault damage zone architecture. SGI congress 2018, Catania
- Jablonská D.**; Di Celma C.; Tondi E. (2016) Superficial and deep-seated gravity-driven deformation horizons within basinal succession: the case study of Maiolica Formation, Gargano Promontory, Southern Italy; EGU General Assembly 2016, Vienna

Poster contributions:

- Jablonska, D.**; Di Celma, C.; Tondi, E. (2018) Large Vertical Breccia Bodies (LVBBs): an outcrop study in Cretaceous near-slope basinal carbonates of Apulia margin, Italy. 20th EGU General Assembly, EGU2018
- Jablonská D.**; Volatili T.; Di Celma C.; Tondi E. (2018) Impact of gravity-driven deposits on fault damage zone architecture. SGI congress, Catania 2018
- Jablonska, D.**; Di Celma, C.; Tondi, E. (2018) Gravity-driven processes in the near-platform basinal carbonates: A case study from Gargano, Southern Italy. AGU Fall Meeting Abstracts, Washington 2018
- Jablonská, D.** (2017) Internal architecture of mass-transport deposits in basinal carbonates: A case study from southern Italy. Geological Society of America Abstracts with Programs. Vol. 49, No. 6, ISSN 0016-7592 doi: 10.1130/abs/2017AM-308703
- Pitts, A., Betka, P., **Jablonska, D.**, Di Celma, C., Materazzi, M. and Tondi, E. (2020) The virtual geology field camp in the Apennines. Geological Society of America Abstracts with Programs. Vol 52, No. 6 doi: 10.1130/abs/2020AM-358613

Pitts, A., McBride, R. A., **Jablonska, D.**, Di Celma, C. and Tondi, E. (2019) Geology field camp in Italy: Apennine Mountains, Vesuvius and Rome; GSA Annual Meeting in Phoenix, Arizona, USA – 2019
Riegel H., Volatili T., **Jablonska D.**, Di Celma C., Agosta F., Mattioni L., Tondi E. (2019) Fault zone evolution and architecture in siliciclastic turbidites and their impact on hydraulic behaviour. 5th International Conference on Fault and Top Seals, EAGE, Palermo.

CONFERENCE ORGANIZING EXPERIENCE

Sep 2019 - Field-Trip guide: 5th International Conference on Fault and Top Seals 2019 EAGE, Palermo,
July 2017 – Secretary: Three destructive Earthquakes, Geology Division, School of Sciences and Technologies, University of Camerino, Italy

FIELD RESEARCH EXPERIENCE

- Field work focusing on basic and advanced geologic mapping, sedimentology and stratigraphy of carbonate and heterolithic siliciclastic rocks, Central Italy
- Basin Analysis in the Calvello Thrust top basin, Southern Italy
- Sedimentology and stratigraphy of turbiditic succession of Monti della Laga Mountains, Central Italy
- Stratigraphic, sedimentological and structural analysis of mass-transport deposits, Gargano, southern Italy
- Dolomitization of tight carbonates, Gargano
- Post-Seismic field mapping 2016/17 central Italy earthquake epicentre
- Analysis of mechanical stratigraphy and fault architecture in tight siliciclastic Macigno Formation, Western Italy

ACADEMIC ACTIVITIES

Accredited courses:

Oct 2021 – Feb 2022 of **Sedimentology and Stratigraphy** – SSD GEO/02, 4CFUs University of Camerino

Teaching support:

May-Jul 2017 – May-Jul 2019 **Academic instructor** at International Geology Field Camp - George Mason University/ University of Camerino, carbonate sedimentology of platform-slope-basin depositional environments

Oct 2016 – 2018 **Fundamentals of Geology** – practical classes with students, field-trip support

May 2017 – **Field Geology** – practical classes with students in basic geological mapping of sedimentary rocks, field-trip support

Co-tutor of Master Theses:

- Petrophysical stratigraphy of the gravitationally-deformed near-slope basinal carbonates, a case study from Gargano, candidate: Addai Owenosward, 2019
- Morphotectonic characterization of the Campotosto Fault (Abruzzo, central Italy); candidate: Francesco Pedicini, 2018

Journal reviewer: Sedimentology

PERSONAL SKILLS

Software Schlumberger Petrel E&P Software Platform (basic), Petroleum Experts MOVE™ (basic) e ESRI ArcGIS® (intermediate), AgiSoft Metashape, Omlandia QGeoloGIS; ImageJ.net - Fiji; Stereonet, Microsoft Office Excel; CorelDraw X6.

Driving licenses: A and B (Europe)

Languages: Czech and Slovak (mother tongue), English (fluent), Italian (fluent), German (intermediate)