CURRICULUM VITAE - Jalal YOUNIS

WORK ADDRESS

Name: Jalal Younis

Academic Title: Assistant Professor

University of Duhok

Faculty of Spatial Planning and Applied Sciences

Department of Applied Geosciences – Head of the Department

Kurdistan Region, IRAQ

E-mail: jalal.younis@uod.ac

Personal e-mail: Younis@seznam.cz

PERSONAL DATA

Date of birth: 25.11.1955

Place of birth: Mosul - I R A Q

Nationality: Iraqi and Czech

Marital status: Married

Children: Two daughters (Asma Younisova, 25 years and Rania Younisova 22 years)

EDUCATION

1975 – 1979	B.Sc. Geology, Department of Geology, Faculty of Science, University of Mosul, IRAQ (June 1979)
1980 – 1983	M.Sc. Hydrogeology and Water Resources, Department of Geology, Faculty of Science, University of Mosul, IRAQ (May 1983)
1989 – 1994	PhD. Hydrogeology, Institute of Geological Engineering, VŠB-Technical University Ostrava, Czech Republic (October 1994)

MEMBERSHIPS:

International Association of Hydrological Sciences (IAHS)

AREAS OF RESEARCH INTEREST

- Flood Simulation and Forecasting, Probabilistic Flood Forecasting.
- Hydrologic Analysis, Modeling and Prediction.
- Mathematical Optimization Techniques and Model Calibration.
- Regional Calibration of Rainfall Runoff Models.
- Catchment Scale Water Management
- EFAS EPS/VAREPS-based forecasts, case study analyses of spring 2006 Elbe flood forecast.

RESEARCH AND PROFESSIONAL EXPERIENCE

March 2011 – January 2016 University of Duhok, College of Spatial Planning and Applied Sciences, Dept. Applied Geosciences
Duhok, Kurdistan Region, IRAQ
Heading the Department

- since 2011 and Teaching Hydrogeology, Groundwater Hydraulics, Geomorphology, GIS Application in Hydrology and supervising MSc students and undergraduate projects.

June 2009 –Feb.20011 Czech Hydrometeorological Institute, Prague, Czech Republic. Hydrological Modeling Applications in Flood Forecasting with 10 – 15 days lead time.

March2007 – Dec. 2008 European Commission, DG Joint Research Centre (JRC), Land Management and Natural Hazards Unit (LMNHU), Institute for Environment and Sustainability (IES)

Main Activities:

- Active participation on collection, pre-processing and handling of hydro-meteorological data.
- Active participation on development and testing of hydrological model Lisflood.
- Calibration and validation of the hydrological model Lisflood on the Czech part of Elbe River Basin at **1km and 5km** grid-scales.
- Calibration of the hydrological model Lisflood on the whole Odra, Vistula and Nemnus River Basins at 5km grid-scale using MARS stations from JRC database.
- Active participation on pre-operational running and testing of European Flood Alert System (EFAS) for transnational European river basins with focus on Elbe.
- Active participation on testing of calibrated LISFLOOD model on Elbe catchment in post-flood event evaluation and analysis and the estimation of new thresholds for EFAS.
- Active participation on post-event analysis with focus on using ensemble weather forecast and added value of using probabilistic weather forecast for earlier flood prediction.
- Active participation on exploration and interpretation of probabilistic forecasting of floods using weather ensembles.

Feb. 2003 – Feb.2007 Detached National Expert seconded to European Commission, DG Joint Research Centre (JRC), Land Management and Natural Hazards Unit (LMNHU), Institute for Environment and Sustainability (IES)

Oct. 1998 – Feb 2003: Czech Hydro-meteorological Institute, Regional branch Ostrava, Czech Republic.

Main Activities:

- Operational hydrological forecasting using Model (HYDROG)
- Adaptation of local hydrological forecasting model for flash floods simulation
- Hydrological now-casting using radar data
- Adaptation and assimilation of radar data for the flood forecasting
- Adaptation of numerical weather prediction data for the flood forecasting

1997 – 1999 Czech Academy of Science (Institute of Geonics), Ostrava-Poruba (Researcher in soil moisture estimation and its influence on grouting injected materials subsurface distribution).

1995 – 1996 Assistant lecturer, VŠB Technical University of Ostrava (Seminars: application of remote sensing in Hydrology and groundwater prospecting. VŠB Technical University of Ostrava)

1989 – 1994 PhD research associate, Institute of Geological Engineering, VŠB-Technical University Ostrava, Czech Republic (October 1994).

1985 – 1989 Assistant lecturer, Remote Sensing Centre, University of Mosul.

1984 – 1985 Assistant lecturer, College of Sciences, University of Salahaddin, Erbil, IRAQ.

Languages:

Language	Reading	Writing	Talking
English	Very good	Very good	Very good
Arabic	Excellent	Excellent	Excellent
Kurdish	Good	Fair	Very good
Czech Language	Good	Good	Very good

PUBLICATIONS

- J.M. van der Knijff, J. **Younis** and A.P.J. De Roo. LISFLOOD: a GIS-based distributed flood and water balance model for European catchments, submitted to "International Journal of Geographical Information Science". To be published during 2008/2009.

- J. **Younis**, J. Thielen, and S. Anquetin. The Benefit of High-Resolution Operational Weather Forecasts for Flash Flood Warning. Hydrology and Earth System Sciences 12, 1039 – 1051, 2008.

- J. Thielen, S. Anquetin, and J. Younis. EXPLORING HIGH-RESOLUTION OPERATIONAL WEATHER FORECASTS FOR FLASH FLOOD PREDICTION. 4th European Conference on Severe Storms, 10-14 Sept. 2007, Trieste – ITALY

- Ad De Roo, et.al., Quality control, validation and user feedback of the European Flood Alert System (EFAS). International Journal of Digital Earth, Vol.4,Suppliment-1,p77–90(2011).
  http://www.tandfonline.com/doi/pdf/10.1080/17538947.2010.510302#.VNSj153F_fc

- **Younis**, J., Ramos, M.H., Thielen, J. EFAS Forecasts for The March-April 2006 Flood In The Czech Part Of The Elbe River Basin – A Case Study. ATMOSPHERIC SCIENCE LETTERS, 9:88-94 (2008).

- De Roo, A., Gierk, M., **Younis**, J., Thielen, J., Ramos, M-H., Bartholmes, J. (2006) Early flood warning in the Elbe: application of the European Flood Alert System (EFAS) in the Elbe. In: *Proceedings of "Wasserstands- und Abflussvorhersagen im Elbegebiet Kolloquium"* (Water level and discharge forecasts in the Elbe area Colloquium), Magdeburg 29-30 November 2005, Bfg, Koblenz, February 2006, p. 55-67.

- **Younis**, J., Szabo, J., Kalas, M., Gierk, M., Bodis, K., de Roo, A., Thielen, J., van der Kniff, J. (2004) Calibration and validation of the LISFLOOD model to the Czech part of Elbe and Odra river basins. In: J. Thielen & A. de Roo (eds.) *European Flood Alert System – 2nd EFAS workshop*, Book of Abstracts, European Commission JRC/IES, Ispra, 10-12 November 2004, p.59-63.

- Gierk, M., **Younis**, J., De Roo. A., Flood simulation and forecasting at European scale – Progress and first results of calibration and validation for

Elbe River Basin with LISFLOOD Model. Proceedings of the international conference – 11th Magdeburg Seminar on waters in Central and eastern Europe: Assessment, Protection, Management, 18-22 October 2004, UFZ Leipzig (Eds. Walter Geller et al.), UFZ Report No. 18/2004, Liepzig, Germany; ISSN 0948-9452.

- Gierk, M., **Younis**, J., Szabo, J., Kalas, M., Bodis, K., van der Kniff, J. (2004) EFAS – Status of data collection for the Elbe river basin and initial results of hydrological model calibration for the German Elbe on 1-km. In: J. Thielen & A. de Roo (eds.) *European Flood Alert System – 2nd EFAS workshop*, Book of Abstracts, European Commission JRC/IES, Ispra, 10-12 Nov. 2004, p. 55-58.

- **Younis**, J., Stary, M., Turecek, B. The using of HYDROG-S as a rainfall-runoff Model for Flood Forecasting in Odra River Basin. Workshop on Advanced Techniques for the Assessment of Natural Hazards in Mountain Areas. June 2000, Igls, Austria.

- **Younis**, J., Remote sensing as a tool for estimating hydrological parameters. XI International Scientific Conference 18 - 20 Oct. 1999 Tech. Univ. Brno, Czech Republic.

- Grmela, A., **Younis**, J., et al, Technological and Hydrogeological Aspects of Disposing of Waste, from Mining and Processing Technologies, back into Abandoned Mine Workings. 17th World Mining Congress, Acapulco, Mexico, October 1997.

- Grmela, A., **Younis**, J., Water Balance of Coal Mines and its Determination under the Conditions of Humid Climate of Central Europe. (First Mining Conference in the Great Jamahirya (Libya) Tripoli, Al-Fateh University, (1997).