

PEOPLE'S DEMOCRATIC REPUBLIC OF ALGERIA
Ministry of Higher Education and Scientific Research

Higher National School of Hydraulics

CURRICULUM VITA

Mohamed MEDDI
Higher National School of Hydraulics-
9000 BLIDA - ALGERIA
Tel. +213665642445
E-mail : m.meddi@ensh.dz

I) – PERSONAL INFORMATION

Date of birth: 03/11/1963
Place of birth: Boufarik- BLIDA
Establishment: Higher National School of Hydraulics
Nationality: Algerian
Latest diplomas: PhD (France)
Current grade: Professor

II) – PROFESSIONAL EXPERIENCE

October 2009 - present
Professor at the Higher National School of Hydraulics
December 2003 - June 2009
Manager of “water, Rock and Plan” research laboratory of the University of Khemis Miliana
July 20, 2005 - September 2009
Professor at the University of Khemis Miliana (Algeria)
October 1, 2002 - July 19, 2005
Lecturer (Maître de conférences) at the University of Khemis Miliana (Algeria)
May 23, 2000 -September 2002
Lecturer (Maître de Conférences) at the hydraulic institute of the University of Mascara.
November 29, 1998 - may 22, 2000
lecturer at the hydraulic institute of the University of Mascara
November 04, 1995 - November 28, 1998
Assistant Professor (Maître assistant) at the hydraulic institute of the University of Mascara
1993/1994 and 1994/1995
Responsible for retraining of engineers at the Ministry of Public Works.
Academic years 1993/1994 and 1994/1995
Postgraduate courses offered at the Higher National School of Hydraulics

III) PUBLICATIONS

More than 50 publications
The principal publications:

- 1) - MEDDI M. Etude du transport solide dans le bassin versant de l'Oued Ebda. *Zeitschrift für Geomorphologie* N.F. 43, 2, Juin 1999, pp. 167-183 (Lieu d'édition : Allemagne).
- 2) - MEDDI M. & MORSLI B. Etude d'érosion et du ruissellement sur bassins versants expérimentaux dans les monts de Beni-Chougrane (Ouest d'Algérie). *Zeitschrift für Geomorphologie* Volume 45/4, Décembre 2001 p. 443-452 (Lieu d'édition : Allemagne).
- 3) - Mohamed Meddi, Ali Arkamose Assani et Hind Meddi : Temporal Variability of Annual Rainfall in the Macta and Tafna Catchments, Northwestern Algeria. *Water Resour Manage* (2010) ISSN 0920-4741, Volume 24, Number 14
- 4) – MEDDI M & TALIA A. (2011) : Runoff evolution in Macta basin (Northwest of Algeria) (2011). *Arabian Journal of Geosciences*, January 2013, Volume 6, Issue 1, pp 35-41. DOI: 10.1007/s12517-011-0318-330) -
- 5) - Mehaiguene M., Meddi M., Longobardi A., Toumi S. (2012) : Low flows quantification and regionalization in North West Algeria. *Journal of arid environments*, 87 (2012) 67-76
- 6) - G. Mahe^{1,*}, G. Lienou², L. Descroix³, F. Bamba⁴, J. E. Paturel⁵, A. Laraque⁶, M. Meddi⁷, H. Habaieb⁸, O. Adeaga⁹, C. Dieulin¹, F. Chahnez Kotti⁸, K. Khomsi¹⁰ (2013): The rivers of Africa: witness of climate change and human impact on the environment. *Hydrological Processes*. . Volume 27, Issue 15, pages 2105–2114, 15 July 2013. Published online in Wiley Online Library (wileyonlinelibrary.com) DOI: 10.1002/hyp.9813
- 7) - Toumi, S., Meddi, M., Mahé, G., et Brou, Y.T., 2013. Cartographie de l'érosion dans le bassin versant de l'Oued Mina en Algérie par télédétection et SIG. *Hydrological Sciences Journal* 58 (7), 1542–1558. DOI: 10.1080/02626667.2013.824088
- 8) - Mohamed Meddi and Samir Toumi (2014) : Regionalisation of rainfall erosivity in northern Algeria. *Int. J. Hydrology Science and Technology*, Vol. 4, No. 2, 2014.
- 9) - Taïbi Sabrina · Meddi Mohamed · Mahé Gil · Assani A. Ali (2015) : Relationships between atmospheric circulation indices and rainfall in Northern Algeria and comparison of observed and RCM-generated rainfall. *Theoretical and Applied Climatology* 01/2015.
- 10) - Mohamed Meddi · Toumi Samir (2015) : Spatial variability and cartography of maximum annual daily rainfall under different return periods in the North of Algeria. *Journal of Mountain Science* 11/2015; 12(6):1403-1421. DOI:10.1007/s11629-014-3084-3
- 11) - Mohamed Meddi, Samir Toumi and Ali A. Assani (2016) : Spatial and temporal variability of the rainfall erosivity factor in Northern Algeria. *Arabian Journal of Geosciences*, April 2016, 9:282. DOI :10.1007/s12517-015-2303-8
- 12) - Ayoub Zeroual, Mohamed Meddi and Ali A. Assani (2016): Artificial Neural Network Rainfall-Discharge Model Assessment Under Rating Curve Uncertainty and Monthly Discharge Volume Predictions. *Water Resources Management* – DOI : 10.1007/s11269-016-1340-8
- 13) - Mohamed Meddi, Samir Toumi and Ali A. Assani (2017) : Application of the L-moments approach to the analysis of regional flood frequency in Northern Algeria. *Int. J. Hydrology Science and Technology*, Vol. 7, No. 1, 2017. Pp. 77-102
- 14) – Zeroual A., Assani Ali A. and Meddi M. (2017) : Combined analysis of temperature and rainfall variability as they relate to climate indices in Northern Algeria over the 1972–2013 period. *Hydrology Research* | 48.2 | 2017.
- 15) - Panagos P., Borrelli P., Meusburger K., Yu B., Klik A., Lim K.J., Yang J.E, Ni J., Miao C., Chattopadhyay N., Sadeghi S.H., Hazbavi Z., Zabihi M., Larionov G.A., Krasnov S.F., Garobets A., Levi Y., Erpul G., Birkel C., Hoyos N., Naipal V., Oliveira P.T.S., Bonilla C.A., Meddi M., Nel W., Dashti H., Boni M., Diodato N., Van Oost K., Nearing M.A., Ballabio C., 2017. Global rainfall erosivity assessment based on high-temporal resolution rainfall records. *Scientific Reports* 7: 4175. DOI: 10.1038/s41598-017-04282-8.
- 16) S Taïbi, M Meddi, G Mahé (2018). Seasonal rainfall variability in the southern Mediterranean border: Observations, regional model simulations and future climate projections. *Atmósfera* 32 (1), 39-54
- 17) M Boukhelifa, M Meddi, E Gaume (2018). Integrated Bayesian Estimation of Intensity-Duration-Frequency Curves: Consolidation and Extensive Testing of a Method. *Water Resources Research* 54 (10), 7459-7477
- 18) F Hallouz, M Meddi, G Mahé, S Toumi, SEA Rahmani (2018). Erosion, suspended sediment transport and sedimentation on the Wadi Mina at the Sidi M'Hamed Ben Aouda Dam, Algeria. *Water* 10 (7), 895
- 19) F Hallouz, M Meddi, G Mahé, S Alirahmani, A Keddar (2018). Modeling of discharge and sediment transport through the SWAT model in the basin of Harraza (Northwest of Algeria) *Water Science* 32 (1), 79-88

IV) COMMUNICATIONS

More than 50 communications

The principal communications:

- 1) – MEDDI M., BOUKHARI Y. et MORSLI B. 2005. Etude du ruissellement et du transport solide dans les Monts de Beni-Chougrane, Algérie : utilisation de la simulation de pluie. Proceedings of Symposium S1 held during the Seventh IAHS Scientific Assembly at Foz Iguacu, Brasil, April 2005). IAHS Pub. 291, 2005
- 2) – M. Meddi & M. Mehaiguene, 2007 : Hydrological balance and Surface Water Resources of the Cheliff-Zahraz basin. , 4th International Conference on Wadi Hydrology 2nd– 4th December, 2007, Muscat OMAN.
- 3) - A. Longobardi, H. Meddi, M. Meddi, M. Mehaiguene (2011). Characterization of precipitation variability in the Mediterranean basin. In Cancelliere, A and Rossi, G. (eds), VI International Workshop EWRA 2011 Water Engineering and Management in a Changing Environment, Quaderni CSEI Catania, III serie, vol 6, pp. 22-32, ISSN 2038-5854. <http://www.ewra2011.dica.unict.it>
- 4) - MEDDI M. (2012) : Human and Natural Constraints and availability of water in Algeria. The Symposium on Environmental Problems in the Arab World : Meeting Challenges of Sustainable Development, 26-28 February 2012 Muscat, Sultanate of Oman.
[http://www.squ.edu.om/webnews/Uploads/file/CESAR/Environment problems in Arab World English.pdf](http://www.squ.edu.om/webnews/Uploads/file/CESAR/Environment%20problems%20in%20Arab%20World%20English.pdf)
- 5) – ZEROUAL A., MEDDI M. & BENSAD S. (2013). The impact of climate change on river flow in arid and semi-arid rivers in Algeria. In: Considering hydrological change in reservoir planning and management. Proceedings of IAHS-IAPSO-IASPEI Assembly, Gothenburg, Sweden, July 2013, IAHS Publ. 362. <http://iahs-iapso-iaspei2013.com/>
- 6) – MEDDI M., TOUMI S. and MEHAIGUENE M. (2013). Hydrological drought in Tafna Basin – Algeria (2013). Proceeding of the 13th International Conference of Environmental Science and Technology, Athens, Greece, 5-7 September 2013. <http://cest2013.gnest.org>
- 7) – MEDDI M. (2013) : Les aléas pluviométriques et les ressources en eau. The uncertainties in rainfall and water resources in the Maghreb Countries. The 7th IWA Specialist Conference on efficiency use and management of water «Water efficiency strategies for difficult times»
October 22-25, 2013 • PARIS, FRANCE
www.iwaefficient.com/2013/
- 8) - TAIBI S , MEDDI M., MAHE G ,ASSANI A , Analysis of Rainfall Extreme Events in Northern Algeria . Variability of Annual and Extreme Rainfall Over Northern Algeria And Relationship With Teleconnections Patterns. Proceedings of the Mediterranean Meeting on Monitoring , modeling and early warning of extreme events triggered by heavy rainfalls – Cosenza – Italy, June 2014
- 9) - Talia A, **MEDDI Mohammed** (26-30 October 2015) : Etude des crues d'OUED SEGGUEUR (Sud Ouest Algérien).Conférence Internationale sur l'Hydrologie des grands Bassins Fluviaux de l'Afrique Hammamet ;Tunisie.
- 10) - KHEDIMALLAH ABDERRAHMANE, MEDDI MOHAMED et MAHE GIL (2016) : Etude de la régionalisation et de la variabilité spatiale des précipitations dans les bassins du Cheliff et de la Medjerda en Algérie. The second International Conference on African Large River Basin Hydrology (2^{ème} Conférence Internationale FRIEND/UNESCO/ Programme Hydrologique International sur l'Hydrologie des Grands Bassins Africains). Dakar, Sénégal 27 novembre – 3 décembre 2016.
- 11) - KHEDIMALLAH Abderrahmane, MEDDI Mohamed et MAHE Gil (2017) : Etude des relations pluie/débit via les coefficients d'écoulement dans le bassin versant de Cheliff(ALGERIE).3emes journées des doctorants de l'IM2E ,les 22-23 mars 2017 ,institut montpellierain de l'Eau et de l'Environnement. université de Montpellier. France.
- 12) - Ouafik BOULARIAH, Antonia LONGOBARDI, Mohamed MEDDI (2017): Hydro-climate temporal variability in a coastal Mediterranean watershed; katja Ganger Copernicus meetings ,du 22 au 29 avril. Vienna. Austria.

V) – Supervision of 15 Doctoral Thesis and 40 Magister thesis

VI) - Responsible of Magister and Doctoral Thesis

VII) - Experience in projects and research programs: Responsible for 10 national and international projects

VIII) Unit Director or laboratory manager since 2003

IX) - Responsible of the Theme: Global change, climatology and hydrological regimes of MEDFREIND -UNESCO WATER program since January 1, 2015

- Council Member, term 2016-2019 - WASER

X) Software : Software for calculating Base Flow Index (BFI) : [LOGICIEL-IEB](#)

XI-Second National Communication on Climate Change : I contributed in the drafting of the second communication on the impact of climate change on water resources