

## Curriculum Vitae

Dr. F.H. Kloosterman

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Name	: KLOOSTERMAN, F.H.	Nationality	: Dutch
Profession	: Hydrogeologist	Place of Birth	: Palembang (Indonesia)
Present employer	: Deltares	Nationality at Birth:	Dutch
Address:	Princetonlaan 6, P.O. Box 80015, 3508TA Utrecht	Date of Birth	: 02-23-1952
Years with company :	21		
Telephone at work:	+31 88 335 7778		

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Email:	fred.kloosterman@deltares.nl
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### Education:

- 1971 - 1974, BSc. in Geology with subtopics Mathematics and Physics from Leiden University, The Netherlands.
- 1975 – 1978, MSc. (cum laude) in Hydrogeology with subtopics Geophysics and Informatics from the Free University, Amsterdam, The Netherlands.
- 1989, PhD (cum laude) from Free University, Amsterdam in Hydrogeology, groundwater flow systems and hydrochemistry of coastal plains in humid tropical areas, Indonesia.

### Key Qualifications:

- Professional experience: 34 years.
- Professional experience in the Netherlands, Indonesia, Egypt, Sudan, Eritrea, Ethiopia, Burkina Faso, India, South Africa, Namibia, Moldova, Poland, Hungary, China, Syria, Jordan, Italy, Kenya and Azerbaijan.
- Cumulative experience abroad of approximately 15 years, 10 years of which as a foreign resident on long-term assignments.
- Extensive experience with field (hydro)geology from numerous field trips abroad in various geological settings, regional hydrogeological mapping, ground water flow systems analysis, groundwater resources assessment studies, extensive experience in numerical groundwater modelling (MODFLOW) of large basins, hydrochemistry and geochemical modelling, geophysical measurements, computer applications in earth sciences, geo-statistical methods,
- Extensive experience with GIS applications (ArcGis Desktop version 10) and development of geo-information systems using ESRI platforms, Oracle and SQL Server databases,
- Extensive experience with computer programming (Pascal, Visual Basic6, C#.NET, Oracle SQL (Toad, Oracle developer) and MS SQL Server). Experience with dotNET development platform since 2004 and subscribed to Microsoft Developers Network MSDN since 2006. Present language C#.NET on Visual Studio 2008 and 2010 developing platforms. Experience with ESRI Arc Objects in C#.NET applications. Experience with OpenGis platforms like MapWindow and ESRI shape file libraries (MapTools). Extensive experience with RockWorks15 and programming. Some experience with Python and OpenGL on dotNET platforms.
- Extensive experience with hands-on training to junior experts in foreign countries in field geology, groundwater flow systems analysis, groundwater resources assessment, GIS/database development, GIS processing, groundwater monitoring and data processing, numerical groundwater modelling (GMS and PMWin Pro), computer programming, Microsoft Office, etc.
- Experience with groundwater flow systems analysis, hydrochemistry and geochemical modelling studies, ecohydrological studies and numerical groundwater modelling in the Netherlands.

**Employment Record:**

- 1978 Hydrogeologist with IWACO BV, Consultants for Water and Environment, Rotterdam, the Netherlands, Burkina Faso.
- 1979-1984 Hydrogeologist (bilateral expert) with the Dutch Ministry of Foreign Affairs, Department for Development Cooperation, Indonesia
- 1985 Hydrogeologist with IWACO BV., Indonesia
- 1986-1989 Senior Hydrogeologist with the Institute for Earth Sciences, Free University Amsterdam, Indonesia.
- 1990-1991 Senior hydrogeologist with IWACO BV., the Netherlands
- 1991-2009 Senior hydrogeologist and former head of groundwater systems section with TNO Institute of Applied Geoscience, Delft, the Netherlands.
- 2010-date Senior hydrogeologist with Deltares, Utrecht, the Netherlands.

**Assignments:**

- 1990-1991 Netherlands Senior advisor for hydrogeology, groundwater system analysis and hydrochemistry. Geochemical modelling experience with PHREEQE. Chemistry of deeper groundwaters in the Central Graben Structure in the Netherlands and the relation between discharge in brook valleys and ecology. Experience with geo-statistical software and analytical element models for groundwater like MLAEM
- 1991-date Netherlands/  
Sweden/  
Spain/  
Poland/  
Indonesia/  
Sudan/  
India/  
Egypt  
Eritrea/  
Ethiopia/  
Hungary/  
Moldova/  
South-Africa/  
Namibia/  
China/  
Syria/  
Italy/  
Jordan/  
Kenya/  
Azerbaijan
- Project leader of hydrogeological, ecohydrological, hydrochemical and water systems oriented projects in the Netherlands and Indonesia. Team leader of the project 'National Groundwater Flow Systems Analysis in the Netherlands'. Training engineers in geological fieldwork and conceptual set-up of numerical groundwater models in semi-arid areas abroad. Fact finding missions and reconnaissance surveys of groundwater resources in semi-arid areas.
- IT related projects (development of information systems) in cooperation with IBM and European partners, sponsored by EEC Telematics research programme. Groundwater resources assessment and hydrogeochemistry investigations in Moldova for TACIS (EU Commission).
- Development, design and programming (ArcView Avenue and Visual Basic 6.0) of REGIS geo-information systems for Hungary, Moldova, India and South Africa. Development of air quality modules in REGIS. Development, design and programming (C#.NET) of TNO REGIS v4 geo-information systems and ESRI plug-ins based on Arc Objects and linked to MS Access databases. Training engineers and hydrogeologists in GIS, relational databases, REGIS v4, field geology, numerical groundwater modelling. Design and development of software (C#.NET applications linked to TNO Oracle databases) for the distribution of saline groundwater in the Netherlands, ZZ-REGIS project.
- Special assignments in Syria and Jordan
- Training engineers and hydrogeologists at the Ministry of Irrigation in Syria in GIS, databases, computer applications, field geology, groundwater assessment and groundwater modelling from 2002 until 2011 in the framework of the Syrian-Dutch Water Cooperation (SDWC) funded by Partners for Water (Dutch Government). Construction of a large regional groundwater model of the northern half of Jordan in the framework of an USAID project.

**Teaching Assignments:**

2002-2011 Three-weeks courses in GIS (Geographical Information Systems), geological software packages, geostatistics and databases for geologists and hydrogeologists from Syria, China and Iraq (given in Syria).

**Command of languages:**

	<b>Speaking</b>	<b>Reading</b>	<b>Writing</b>
<b>Dutch</b>	<i>excellent</i>	<i>excellent</i>	<i>excellent</i>
<b>English</b>	<i>good</i>	<i>excellent</i>	<i>good</i>
<b>French</b>	<i>fair</i>	<i>good</i>	<i>fair</i>
<b>German</b>	<i>fair</i>	<i>good</i>	<i>fair</i>
<b>Indonesian</b>	<i>good</i>	<i>excellent</i>	<i>good</i>

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Signature of Staff member:

Date: August, 16, 2012

