

CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

1. **Proposed Position:** Capacity Development Specialist (I-15)
2. **Name of Firm:** Hydrau-Tech, Inc.
3. **Name of Staff :** Dr. Mohan Reddy Junna
4. **Date of Birth:** September 14th, 1951 **Nationality:** U.S.A
5. **Education:**

B.S. 1974	Agriculture	A.P. Agricultural University, Hyderabad, India
M.S. 1976	Irrigation	Utah State University, Logan, Utah, USA
Ph.D. 1980	Irrigation&Drain.	Colorado State University, Fort Collins, Colorado, USA
6. **Membership of Professional Associations:**

American Society of Civil Engineers (ASCE)
United States Committee on Irrigation & Drainage (USCID)
7. **Other Training:** None
8. **Countries of Work Experience:**

India, Belgium, Romania, Moldova, Georgia, Kyrgyzstan, Uzbekistan, Turkmenistan, United States of America.
9. **Languages**

English	Good
Telugu	Good
Hindi	Good
10. **Employment Record** [*Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.*]:

Dr. Junna has more than 28 years of experience in the field of water engineering, covering the following areas: irrigated agriculture; design and operation of irrigation canals; design and operation of irrigation systems; optimal operation of reservoirs; modeling of flow through rivers and streams; neural network and fuzzy logic modeling of water resources systems; modeling of groundwater flow and contaminant transport through soils; information technology; and programming languages (C, C++, and Java). Dr. Junna routinely teaches courses in the above areas. He has been a consultant to USAID, UNDP, and World Bank, and has the opportunity to work on water management problems in India, Sri Lanka, El Salvador, Belgium, Greece, New Zealand, and China. More specific experiences are as follows:

- Starting from August of 2002, spent more than 6 months in Romania, training several Water User Associations (WUAs) in several different irrigation projects in Romania, in the area of Operation and Maintenance of Irrigation Systems in Romania. Worked with Professor Nicolaescu (Director of O&M for SNIF, Bucharest). This provided me an opportunity to learn more about the water resources situation in Romania, and the level of technical skills available in Romania.

- Dr. Junna is a leading specialist in the world in the area of optimal control and regulation of irrigation canals. Currently, he is the consultant to evaluate the canal control algorithm developed (by a leading international company) for the biggest canal automation project in the world (Sardar Sarovar Project in Gujarat state, India) carrying a discharge of 1100 m³/s.
- UNDP expert to the Department of Electronics, Government of India, on the topic of computerized water resources management. (1989-1994)
- Developed a neural network model for real-time regulation of river flows using adaptive neural networks. This algorithm was developed for a 25 km reach on the Arkansas River in Colorado, USA. (1997-1998)
- Since 2002, developed and conducted several training programs in the following countries in the area of irrigation water management: Romania (7 months), Georgia (3 months), Uzbekistan (2 months), Kyrgyzstan (6 months), and Turkmenistan (1.5 months).
- Extensive experience in rehabilitation of irrigation systems in Kyrgyzstan, Uzbekistan, Romania, Moldova, and Georgia.
- Wrote a Chapter on "Regulation of River Flows using Adaptive Neural Networks" for a Book titled "Artificial Neural Networks in Hydrology". (1999)
- Lectured at the Tashkent Institute for Irrigation and Agricultural Mechanization Engineers (TIAME) on the topics of "Improved Water Management Strategies in the Aral Sea Basin", January 2003.
- USAID Consultant to India to identify pilot projects on improved water and energy conservation management for five different states in India. (November 2000).
- Presented a proposal to the Ministry of Water Resources, Government of India, on the topic of "Information Technology for Revolutionizing Water Resources Management in India in the 21st Century".
- Developed a software package for "Web-Based Administration of Casper-Alcova Irrigation District- Casper, Wyoming". The project was funded by the Wyoming Water Development Commission.
- Worked with the Mike-Basin program at the Institute for Land and Water Management, Leuven, Belgium. (May of 1988). During the same time, taught a course on "Multi-objective Optimization of Water Resources Systems".
- Training Advisor/Coordinator for a Water Resources Consolidation project (funded by World Bank) in India. (1988-2000).

From [Year]: 1985 **To [Year]:** 2008

Employer: University of Wyoming
Positions held: Professor

From [Year]: 1980 **To [Year]:** 1985

Employer: Colorado State University
Positions held: Research Assistant Professor

<p>11. Detailed Tasks Assigned</p>	<p>12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned</p> <p>1. Name of assignment or project: Orissa Water Resources Consolidation Project (OWRCP), 1998-2001</p>
---	---

<p>Capacity</p> <p>Development</p> <p>Specialist</p>	<p>Location: Bhubaneshwar, Orissa, India</p> <p>Client: Department of Water Resources, Ministry of Irrigation, Government of Orissa (GOO), India</p> <p>Main project features: Water Resources Development, and Irrigation System Rehabilitation, On-Farm Water Management.</p> <p>Positions held: Capacity Development Specialist (International)</p> <p>Activities performed: Identification of Training programs (local and international), equipment, software, human resources for strengthening the Department of Water Resources in the area of water resources planning and, management, irrigation systems operation, maintenance, and management.</p> <p>2. Name of assignment or project: Western Basins Water Resources Management Project (WB_WRMP), 2008-2014</p> <p>Location: Herat, Afghanistan</p> <p>Client: Ministry of Energy and Water Resources, Government of Afghanistan.</p> <p>Main project features: Water Resources Development, and Irrigation System Rehabilitation, On-Farm Water Management.</p> <p>Positions held: Capacity Development Specialist (International)</p> <p>Activities performed: Identification of short-term and long-term training programs (local and international), identification of training institutions (local and international), equipment, and software for strengthening the Department of Water Resources in the area of water resources planning and management, irrigation systems operation, maintenance, and management.</p> <p>3. Name of assignment or project: Irrigation Rehabilitation Project, World Bank funded, 2004 (3 months)</p> <p>Location: Georgia</p> <p>Client: Ministry of Agriculture and Forestry, Government of Georgia</p> <p>Main project features: Irrigation System Rehabilitation and On-Farm Water Management.</p> <p>Positions held: Irrigation Training Specialist (International)</p> <p>Activities performed: Development of curriculum and training material for improved operation and maintenance of irrigation and surface drainage systems for Water Users Associations from different parts of the country.</p> <p>4. Name of assignment or project: Water Users associations Development Project (WUADP), USAID, 2002-2005</p> <p>Location: Romania</p> <p>Client: Ministry of Agriculture, Environment, and Forestry, Government of Romania.</p>
--	---

	<p>Main project features: Irrigation System Rehabilitation and On-Farm Water Management (Pumping Stations, Canals, Sprinkler Systems)</p> <p>Positions held: Irrigation Training Specialist (International)</p> <p>Activities performed: Developed training materials and conducted training programs on the topics of rehabilitation, operation, and maintenance of irrigation systems operated by more than 104 Water Users Associations (WUAs) in Romania.</p> <p>5. Name of assignment or project: Water Users Associations Support Program (WUASP), USAID, 2006-2008</p> <p>Location: Uzbekistan and Kyrgyzstan</p> <p>Client: Ministries of Water Resources, Government of Uzbekistan & Government of Kyrgyzstan</p> <p>Main project features: Irrigation System Rehabilitation and On-Farm Water Management.</p> <p>Positions held: Irrigation Water Management Specialist (International)</p> <p>Activities performed: Developed training materials and conducted training programs in more than 15 locations (in both the countries) for Water Users Associations on the topics of improved on-farm water management, and construction of flow measurement structures. In addition, provided assistance in developing rehabilitation plans.</p>
--	---