### **BIO-DATA**

1. Name Dr. Grasius M. G.

2. Age & Date of Birth 64 Yrs., 8-5-1952

3. Residential Address Dr. Grasius M. G., Mattamana,

Chelad P. O., Kothamangalam – 686 681

**2** ○ 0485 - 2571212(R)

Mob. 94471 82412, 9447616412 Email grasius\_mg17@yahoo.co.in

# 4. Degrees obtained:

University /	Name of Institution /	Degree & Field	Year	Marks /
Authority awarding	Department	of specialisation		Cumulative
degree				Point Index
_				(CPI)
Kerala	M. A. College of Engg,	B.Sc. (Engg.)	1974	65.7 %
	Kothamangalam	Civil Engg.		University
				2nd Rank
IIT Kanpur	Civil Engg. Dept.	M.Tech.	1983	9.7
		Environmental		
		Engg.		
IIT Kanpur	IIT Kanpur Civil Engg. Dept.		1997	10
		Environmental		
		Engg.		
		Wastewater		
		Treatment.		

# 5. Employment record (starting from the latest position)

University/College	Designation	Period	
HOLY KINGS	Principal	Nov.2011 – May 2015	
College of Engineering and			
Technology.			
Pampakuda.			
Viswajyothi	Principal	August 2007 – August 2011	
College of Engineering and			
Technology			
Vazhakulam.			
Mar Athanasius College of		22 22 22 22 22 22 22 22 22 22 22 22 22	
Engineering, Kothamangalam.	Prof. & Head of the Dept.	02-06-2004 to 31.05.2007	
	Head of the Dept.	11-04-2003 to 31.05.2007	
	Asst. Professor-in- charge of Principal	01-04-2000 to 07-04-2003	

Asst. Professor	08.08.1994 to 31-03-2000	
Asst. Professor – non cadre	16.09.1985 to 07.08.1994	
Lecturer	28-10-1974 to 16-09-1985	

# 6 (a). Achievements during the tenure as Principal and Head of Civil Engineering Department of M. A. College of Engineering, Kothamangalam (2000 – 2007) in Academic Administration and Institutional Management.

- i. Obtaining NBA, AICTE, New Delhi. Accreditation of Civil, Mechanical and Electrical & Electronics Engineering Departments of the Institution in 2002.
- ii. Obtaining approval and affiliation for the MCA programme from M. G. University in 2001.
- iii. Establishing Master's programme in Civil and Mechanical engineering Departments in 2004.
- iv. Obtaining seat increase to 120 from 90 to Civil, Mechanical and Electrical & Electronics Branches and to 60 from 45 to Electronics and Computer Science Departments.
- v. Obtaining Direct Central Assistance worth Rs. 75 Lakhs to the Institution during tenure as Principal and Rs. 28 Lakhs to the Civil Engineering Department during tenure as Head of the Department under MODROBS and RPS from AICTE, New Delhi.
- vi. Obtaining funding and sanction for 7 Short Term Training Programmes (STTP) from AICTE / ISTE during 2000- 2003 and conducting the same for increasing the academic excellence of faculty members of various Institutions.
- vii. Obtaining funding and sanction for 4 STTPs / Workshops from AICTE to the Civil Engineering Department (2003 2007)
- viii. Setting up Departmental Libraries in all departments.
- ix. Maintaining excellent academic ambience in the campus as Principal and thus obtaining 10 to 12 University ranks per year during 2001 2003.
- x. Increasing the placement opportunities for graduates leading to ensuring 70% placement in 2003 in the Institution and 85% placement in 2007 in the Civil Engineering Department.
- xi. Maintaining 86% to 96% pass with First Class or above in Civil Engineering Departments for the years 2004 to 2006.
- xii. Actively involved in drafting the regulations and syllabus of B. Tech Programme in M. G. University, being a member of Core-Committee, B. Tech., M. G. University.
- xiii. As principal of the college during 2000 to 2003, Ensured that:
  - a. All efforts were taken to get good coordination and commitment from all faculty members, staff and students under the guidance of the Management and

- authorities of M. G. University to maintain a good academic ambience in the campus.
- b. Academic calendar agreed with the University calendar.
- c. Ragging incidences were strictly controlled by promoting awareness, effective surveillance and strict action against culprits.

# 6 (b). Achievements during the tenure as Principal of Viswajyothi College of Engineering and Technology, Vazhakulam (August 2007 – July 2011) in Academic Administration and Institutional Management.

- i. Obtained accreditation from NBA, AICTE, New Delhi. to Electronics & Communication Engineering and Computer Science & Engineering Departments of the college in 2010.
- ii. Instrumental in obtaining AICTE sanction and University affiliation for the following courses:
  - a. Seat increase from 60 to 120 in Electronics & Communication Engineering Branches.
  - b. New B.Tech course in Civil Engineering Branch.
  - c. New M.Tech course in Electronics & Communication Engineering and Computer Science & Engineering Departments.
  - d. MBA programme.

#### Annexure A

### 7. List of Conferences, Short-term Courses etc. organised / participated in the last ten years

- a) **Organised:** 
  - 1. ISTE State Annual Convention 1998, in the capacity of ISTE Chapter Chairman.
  - 2. Short Term Training Programme on Energy Conservation of Built Environment, sponsored by AICTE, New Delhi, November 5 18, 2001 Coordinator.
  - 3. One day workshop on Human Initiated Degradation of Environment Problem and Solution, sponsored by AICTE, June 7, 2004 Coordinator.
  - 4. Staff Development Programme on Art of Effective of Teaching sponsored by AICTE, New Delhi, October 7 21, 2004 Coordinator.
  - 5. Staff Development programme on "Enrichment of Effective Teaching skills

    An introduction to the Theory and methodology" sponsored by AICTE, New Delhi; Nov. 9-21, 2009. Coordinator.

#### b) Attended:

1. QIP short term course on "Advanced Water and Wastewater Treatment Technologies and Modelling Techniques", conducted at IIT, Bombay, November 29 – December 3, 2004

- 2. QIP Short Term Course on "Managing Municipal Solid and Biomedical Waste for Communities" conducted at IIT, Bombay, November 28- December 2, 2005.
- 3. QIP Short Term Course on "Recent Developments in Wastewater Treatment using Anaerobic Reactors" held at Guwahati, December 26-30, 2006.
- 4. MHRD-AICTE Sponsored Summer School on "Strategic Management for Excellence", Organized by Media Centre, NITTTR, Chandigahr, July 28-August1, 2008
- 5. Short term training program on "Self Awareness & Higher Goal in Education" (SAHGE) organized by IIT, Madras. June 21 25, 2011.

# Special Training Courses Undergone

- a) Training on design and operation of UASB reactors, jointly organised by Govt. of India and Govt. of Netherlands under Ganga Action Plan.
- b) Training on Atomic Absorption Spectrophotometer for Heavy Metal Analysis, Melbourne, Australia.
- c) Seminar on Sewerage & Stormwater Management, Kochi, organised by Corporation of Kochi, GCDA and Indian Express.
- d) Workshop on Anaerobic Process in Wastewater Management, organised by Cochin University of Science and Technology, India, Delf University of Technology, The Netherlands and Wageningen University, The Netherlands, October, 2000.

#### 8. Consultancy and Sponsored Research activities.

Year	Organisation	Project Title	Amount received	
See Annexure B				

#### 9. Publications

Papers publis	shed in	Papers	presented	in	Review Papers	Books
referred journals Conferences						
See Annexure C						

10. Membership of Scientific and Professional Societies

ISTE Life Member

#### References:

1. Prof. Dr. C. Venkobachar, formerly Professor of Civil Engineering Department, IIT Kanpur.

#### **2** 09611891891

2. Prof. Dr. J. Isaac, Formerly Principal, Rajagiri School of Engineering and Technology, Rajagiri Valley P.O. Kakkanadu, Kochi, 682039 and Principal M. A. College of Engineering, Kothamangalam.]

#### Annexure B

## **Details of R&D Project Undertaken**

Consultancy and Sponsored Research Activities.

- a) Associated with the Consultancy Centre of M.A. College of Engineering, Kothamangalam. Some of the works recently involved in:
  - 1. Associated with Kerala Industrial and Technical Consultancy Organisation (KITCO), Kochi and designed a 0.4 MLD wastewater treatment plant for International Air Port, Nedumbasseri, Kerala.
  - 2. Preparation of Effluent Treatment Modification for Palappillil Specified Block Rubber Pvt. Ltd., Kothamangalam, Kerala 0.2 MLD capacity.
  - 3. Consultant to Gramox Papers & Boards Ltd., Muvattupuzha, Kerala in Connection with Effluent Management.
  - 4. Design of O.I.MLD Effluent Treatment Plant for Nirmal Gram Milk Chilling Plant, Keerampara, Kerala.
  - 5. Design of Effluent Treatment System for Parathuvayalil Hospital and Parathuvayalil Pharma Products, Keezhillam, Kerala.
  - 6. Design of Effluent Treatment System for Udaya Rubber Works, Kothamangalam.
  - 7. Design of Sewage Treatment System for Sabarimala Sannidhanam for Travancore Devaswom Board, Trivandrum.
  - 8. Design of Effluent Treatment Plant for Basil Rubber Factory, Thattekkadu, Kothamangalam.
  - 9. Consultant to Ecosmart, Bombay in preparation of Master Plan for Sabarimala Development.
- b) Associated with NOBLE TECH Consultants, Kochi and designed:
  - 1. Wastewater Treatment System for a 45 units residential apartment for Skyline Builders, Kochi.
  - 2. Wastewater Treatment System for 120 bed hospital for Gautham Hospital, Kochi.
- c) Associated with Ganga Project Directorate, Delhi, India in connection with Ganga Action Plan and was a member of:
  - 1. Expert committee for drafting specifications for design, construction, operation and maintenance of UASB treatment system to be used in Ganga/Yemuna and other river action plans.
  - 2. Expert Group for evaluation of Ganga Action Plan Phase I.

Actively involved in the following projects.

1. Performance evaluation of 36 MLD, UASB plant treating tannery wastewater at Jajmau, Kanpur at the instance of Ganga Project Directorate [GPD].

Worked as Senior Project Fellow and was involved in the preparation of project proposal, collection and analysis of wastewater, performance evaluation, suggesting corrective measures for improvement of reactor performance, documentation etc.

The objective of the study was to generate a data bank on the performance of the 36 MLD, UASB plant, which is first of its kind for the size and type of waste treated, over a period of more than a year and to compare it with the anticipated performance. The study helped in delineating certain design and operational short comings causing a low treatment efficiency. Suggested corrective measures are being undertaken.

- 2. Development and design of a modified Upflow Anaerobic Sludge Blanket (UASB) reactor for domestic wastewater management resulting in 40% reduction in construction and maintenance cost. This design have been developed especially for application in Ganga/Yamuna/River action plans in the country.
- 3. Involved in performance evaluation of 5 MLD UASB demonstration unit treating domestic wastewater, constructed under Ganga Action Plan at Jajmau, Kanpur.
- d) Associated with consultancy wing of IIT, Kanpur since 1990. Involved in Design and Performance Evaluation of Effluent Treatment Units of Sugar and related Industries. Some of the works involved in:
  - 1. Evaluation of Effluent Management Schemes at Gauri Sugar Mill, Gauri Bazar, (U.P., India).
  - Evaluation of Effluent Management Schemes at Kath Kuiyan Sugar Mill, Kath Kuiyan (U.P., India)
  - 3. Evaluation of Effluent Management Schemes at Padruna Sugar Mill, Padruna (U.P., India).

#### Annexure C

#### Papers Published in referred journals

- 1. <u>M.G.Grasius</u>, Leela Iyengar, H.B.Singh and C.Venkobachar, "Performance Evaluation and Modification of a UASB Reactor Treating Sugar Industry Effluent: A Case Study", IChemE, October (1994).
- 2. <u>M.G.Grasius</u>, Leela Iyengar and C.Venkobachar, "Anaerobic Biotechnology for the Treatment of Wastewaters: A Review", Journal of Scientific & Industrial Research, 56, (1997) 385.

#### Papers presented in conferences

- 1. <u>M.G.Grasius</u>, Leela Iyengar and C.Venkobachar, "Optional Design of Anaerobic Digestion to Maximize Biogas Production", Presented in the First International Symposium on Environmental Technology for Developing Countries, Bogazici University, Istanbul (Turkey) (1982).
- 2. <u>M.G.Grasius</u>, Leela Iyengar and C.Venkobachar, "Peformance Prediction of High Rate Anaerobic Process", Proceedings of All India Seminar of Anaerobic Treatment of Wastes, Organised by Institution of Engineers, IIT, Kanpur, 33-41, (1991).
- 3. Ligy Philip, P.C.Sabumon, T.R.Muraleedharan and M.G.Grasius, "Energy Scenario for Future: Technology Trends and Government Intervention", Proceedings of the International Symposium on Science Technology and Society, University of Endhoven, Teh Netherlands (1992).
- 4. T.R.Muraleedharan and M.G.Grasius, "New Challenges for the Engineer in an Environment Friendly World: an Insider's View Point", National Seminar on Technical Education and the Environment, Organized by Indian Society of Technical Education, IIT, Kanpur, 127-131 (1993).
- 5. <u>M.G.Grasius</u>, Leela Iyengar and C.Venkobachar, "Treatment of Domestic Waste Water by Anaerobic Hybrid Reactors", Presented in National Seminar on Clean Environment Strategies, Planning and Management at Lucknow, India on 12-13 November (1993).
- M.G.Grasius, Leela Iyengar, H.B.Singh and C.Venkobachar, "Performance Evaluation and Modification of a UASB Reactor Treating Sugar Industry Effluent: A Case Study", Presented in International Symposium on Bioproducts Proceedings, Technologies for the Tropics, Institute of Advanced Studies, University of Malaya, 4-7 January, (1994).
- 7. S.R.Dixit, Y.N.Khare, <u>M.G.Grasius</u>, Leela Iyengar and C.Venkobachar, "Energy Production from Tanney Effluent Using UASB Process: A Case Study at Kanpur", Proceedings of International Seminar, Technology for a Better Tomorrow, Institution of Engineers (India), Calcutta, December (1994).
- 8. <u>M.G.Grasius</u> and T.V.Jacob, "Storm Flood Control and Sewage Disposal for Cochin City: Some Noval Concepts", Seminar on Sewerage & Stormwater Management, Kochi, Organised by Corporation of Kochi, GCDA, Indian Express, Mathrubhumi, I.E. (India), (1997).
- 9. T.V.Jacob and M.G.Grasius, "Anaerobic Treatment Process for Wastewater: Presentation of Cases", Workshop on Anaerobic Process in Wastewater Management, organised by Cochin University of Science and Technology, India, Delf University of Technology, The Netherlands and Wageningen University, The Netherlands, October, 2000.
- 10. <u>M.G.Grasius</u>, "Treatment of Low Strength Wastewaters using a Modified UASB Reactor", Workshop on Anaerobic Process in Wastewater Management, organised by Cochin

- University of Science and Technology, India, Delf University of Technology, The Netherlands and Wageningen University, The Netherlands, October, 2000.
- 11. <u>M.G.Grasius</u>, "Cost Effective Wastewater Treatment Packages", Short Term Training Programme on Energy Conservation of Built Environment, sponsored by AICTE and organized by Mar Athanasius College of Engineering, Kothamangalam, November 2001.
- 12. <u>M.G.Grasius</u>, "High Rate Anaerobic Wastewater Treatment Process", Short Term Training Programme on Technics for Effective Management of Environment, sponsored by DTE, Trivandrum and organized by Government Engineering College, Thrissur, January 2004.
- 13. <u>M.G.Grasius</u>, "Wastewater Treatment Some Concepts of Recent Origin", One day Workshop on Human Initiated Degradation of Environment Problem and Solutions, sponsored by AICTE and organized by Mar Athanasius College of Engineering, Kothamangalam, June 2004.
- 14. <u>M.G.Grasius</u>, "Cost Effective Wastewater Treatment System", One day Workshop on Environment and Pollution Awareness, sponsored by AICTE and organized by SCMS School of Engineering & Technology, Karukutty, Kochi, September 2004.
- 15. <u>M.G.Grasius</u>, "Anaerobic Processes for Wastewater Treatment", AICTE sponsored Short Term Course on "Recent Developments in Wastewater Treatment using Anaerobic Reactors" organized by Department of Civil Engineering, IIT, Guwahati, December 2006.
- 16. <u>M.G.Grasius</u>, "Technological Interventions for Wastewater Management" a Short Term Course on "Advanced Technological Interventions for Environmental Sustainability" under QIP, DTE, Kerala organized by RIT, Kottayam, March 2007.
- 17. M.G.Grasius, "Suitability of Anaerobic Treatment Systems for Cochin City", All India Seminar on "Environment Management in Infrastructure Projects and Chemical Industries" organized by The Institution of Engineers (India) Cochin Local Centre, February 22-23, 2008
- 18. <u>M.G.Grasius</u>, "Highrate Wastewater Treatment Systems", short term training programme on "Energy and Environment", organized by ISTE, New Delhi and Sree Narayana Gurukulam College of Engineering, Kadayirippu, Kerala, January 3–7, 2011.