

## **CURRICULUM VITAE**

Flat # D2, H.No# 74-10-3/7  
SNK Chitturi Emerald Apartments,  
Opp Datla Bhaskar Raju Childrens Hospital,  
Prakash Nagar, Rajahmundry – 533103.  
Andhra Pradesh, India.  
Mobile: 9490350015  
**padmaiin@yahoo.co.in**

***Dr. I.J.N.PADMAVATHI***

---

Currently working as Assistant Professor in the Department of Biochemistry at Adikavi Nannaya University, Rajahmundry.

### **ACADEMICS**

- Ph.D. (**Biochemistry**) - National Institute of Nutrition, Osmania University, Hyderabad, 2010
- M.Sc. (**Biochemistry**) - University of Hyderabad, Hyderabad, First Division (73.6%). 2002
- B.Sc. (Microbiology, **Biochemistry**, Chemistry) - Andhra University, First Division (72%). 1999

### **TEACHING EXPERIENCE: 10 years**

- Working as Assistant Professor in the Department of Biotechnology and Biochemistry from 18<sup>th</sup> August, 2012 till date.

Other Achievements:

- Qualified the exam conducted by Andhra Pradesh Public Service Commission: Vijayawada in Pursuance of Notifications for Assistant Professors issued by various Universities of AP (Regd No 180406542).

### **AREAS OF INTEREST**

- Molecular Endocrinology
- Protein Biochemistry

### **AWARDS AND FELLOWSHIPS:**

- **Junior Research Fellowship** from Indian Council of Medical Research (ICMR) during July 2004 -2006.
- **Senior Research Fellowship** from ICMR during July 2006 – 2009.
- **Young Scientist Award** from Andhra Pradesh Akademi of Sciences (APAS) in 2010.

### **RESEARCH EXPERIENCE: 9.5 years**

- Post Doctoral Fellow in DBT funded project entitled “**Fetal programming for neuromusculoskeletal development in the rat offspring: Role of antenatal and perinatal magnesium deficiency**” from March 2010 to June 2012 at National Institute of Nutrition, Hyderabad.
- Ph.D. work: Worked on DBT funded project entitled “**Role of maternal and peri / postnatal chromium status in the development of adiposity and insulin resistance in the offspring**” at National Institute of Nutrition, Hyderabad, India from 2004 to 2010.
- Worked as Junior Research Associate for a project entitled “**Biomolecular Library**” in Bijam Biosciences, (NFCL), Hyderabad, India from July 2002 to October 2003.
- Worked in a project entitled “**Glycosidase activities from the seeds of Triticale**” during the course of M.Sc. in the Department of Biochemistry, University of Hyderabad, Hyderabad, India from January 2002 to April 2002.

### **MEMBERSHIP IN PROFESSIONAL SOCIETIES**

- Society of Biological Chemists (India).

### **PAPERS PUBLISHED**

1. Anju Elizabeth Thomas, **Padmavathi J.N. Inagadapa**, Sugeetha Jeyapal, Naga Muralidhar Merugu, Rajender Rao Kalashikam, Raghunath Manchala (2018). Maternal Magnesium Restriction Elevates Glucocorticoid Stress and Inflammation in the Placenta and Fetus of WNIN Rat Dams. *Biological Trace Element Research* 181(2):281-87. **IF – 2.43**

2. Rajender Rao Kalashikam, **Padmavathi J.N. Inagadapa**, Anju Elizabeth Thomas, Sugeetha Jeyapal, Nappan Veettil Giridharan, Manchala Raghunath (2014). Leptin gene promoter DNA methylation in WNIN obese mutant rats. *Lipids in Health and Disease* 13(1):25 **IF – 2.31**
3. K.R. Rao\*, **Padmavathi I J N**, Venu L and Raghunath M. (2012). Does 11 $\beta$ -Hsd1 Associate with the Development of Visceral Adiposity in Maternal Mg Restricted Wistar/Nin Rat Offspring?. *Endocrinology & Metabolic Syndrome* 10-12 **IF - 3.5**
4. K.R. Rao, **Padmavathi I J N** and Raghunath M. (2012). Maternal micronutrient restriction programs the body adiposity, adipocyte function and lipid metabolism in offspring: A review. *Reviews in Endocrine and Metabolic Disorders* 13(2):103-8 **IF - 4.083**
5. Anand Kumar Kalle, Lalitha Anumula, Pavithra D, **Padmavathi I.J.N**, Manisha Ganeshan, Rajender Rao K, Venu Lagishetty, Harishanker Nemani, Umakar Reddy S, Giriraj Ratan Chandak, Shantanu Sengupta and Raghunath M. (2012). Maternal dietary folate and / or vitamin B12 restrictions alter body composition (adiposity) and lipid metabolism in Wistar rat offspring. *Journal of Nutritional Biochemistry* 24(1):25-31 **IF - 4.6**
6. **Padmavathi I J N\***, K.R. Rao\* and Raghunath M. (2011). Impact of maternal chromium restriction on glucose tolerance, plasma insulin and oxidative stress in Wistar/NIN rat offspring: *Journal of Molecular Endocrinology* 47 (3) 261-71. **IF -3.628**
7. Manisha Ganeshan, P.B. Sainath, **I.J.N. Padmavathi**, L.Venu, Y. Durga Kishore, K. Anand Kumar, N.Harishanker, J. Srinivasa Rao, M. Raghunath (2011) Maternal Manganese Restriction Increases Susceptibility to High-Fat Diet-Induced Dyslipidemia and Altered Adipose Function in WNIN Male Rat Offspring *Experimental Diabetes Research* 2011:11 **IF – 1.5**
8. **I.J.N. Padmavathi**, Rajender Rao K, Venu L, Ganeshan M, Anand Kumar K, Narasimha Rao Ch, Harishankar N, Ismail A, Raghunath M (2010) Chronic maternal dietary chromium restriction modulates visceral adiposity: probable underlying mechanisms. *Diabetes* 59(1):98-104. **IF – 8.2**

9. **I.J.N. Padmavathi**, K Rajender Rao, L Venu, Ayesha Ismail and M Raghunath (2010). Maternal dietary chromium restriction programs muscle development and function in the rat offspring. *Expt Biol Med* 235: 349-355. **IF – 2.89**
10. **I.J.N. Padmavathi**, Kishore YD, Venu L, Ganeshan M, Harishankar N, Giridharan NV & Raghunath M (2009). Prenatal and perinatal zinc restriction: effects on body composition, glucose tolerance and insulin response in rat offspring. *Exp Physiol* 94, 761-769. **IF – 4.1**
11. M. Raghunath, L. Venu, **I.J.N. Padmavathi**, Y.D. Kishore, M. Ganeshan, K. Anand Kumar, P.B. Sainath & K.R. Rao (2009). Modulation of macronutrient metabolism in the offspring by maternal micronutrient deficiency in experimental animals. *Indian J Med Res* 130: 655-665. **IF – 1.6**
12. Lagishetty Venu, **I.J.N. Padmavathi**, Durgakishore Y, Vijayabhanu N, Rajender Rao K, P B Sainath , Manisha Ganeshan and Manchala Raghunath (2008). Long-term effects of maternal magnesium restriction on adiposity and insulin resistance in rat pups. *Obesity (Silver Spring)* 16(6):1270-6. **IF – 3.53**

### Online letters to the editor

1. **I.J.N. Padmavathi**, L Venu and M Raghunath (2010). Response letter to the comment on: Padmavathi et al. (2010) Chronic Maternal Dietary Chromium Restriction Modulates Visceral Adiposity: Probable Underlying Mechanisms. *Diabetes*; 59:98-104. **Online letters to the editor**; *Diabetes* 59.

### ABSTRACTS IN JOURNALS

1. M. Raghunath, L. Venu, Y. Durga Kishore, and **I.J.N. Padmavathi** (2005) Fetal origin of adiposity: Role of maternal and peri-natal micronutrient status. (Abstract No P2-057) *Pediatric Research* 58(5): 1084.
2. L. Venu, **I.J.N. Padmavathi**, Y. Durga Kishore and M. Raghunath (2005) Long term programming of postnatal adiposity by maternal and postnatal magnesium status. (Abstract No P3-104) *Pediatric Research* 58(5): 1127.

3. **I.J.N. Padmavathi**, Durga Kishore Y, Venu L, Manisha Ganeshan, Krishnakanth A and Raghunath M (2007) Effect of maternal chromium restriction on body adiposity, insulin response and glucose tolerance in male and female WNIN rats (Abstract) *Diabetes and Vascular Disease Research*: 4(3) : 252.
4. Manisha Ganeshan, **I.J.N. Padmavathi**, Durga Kishore Y, Sainath PB, Krishnakanth A, Venu L and Manchala Raghunath (2007) Maternal Manganese restriction transiently impairs glucose tolerance and insulin secretion in male rat offspring (Abstract 2635 – PO), *Diabetes (Supplement to June issue)*.
5. Manisha Ganeshan, **I.J.N. Padmavathi**, Durga Kishore Y, Sainath P B, Krishnakanth A and Raghunath M (2007) Varied effects of maternal Mn restriction on body adiposity and lipid profile in male and female rat offspring. (Abstract) *Diabetes and Vascular Disease Research* 4(3): 252.
6. K. Anand Kumar, I.J.N. Padmavathi, A. Lalitha, G. Manisha, K.R. Rao, J. Mahesh Kumar, G. Chandak, M. Raghunath (2010). Chronic maternal vitamin B12 restriction induced changes in the wistar rat offspring are partly correctable by rehabilitation: CMR e-journal
7. A.E. Thomas, K. Rajender Rao, J. Sugeetha, I.J.N. Padmavathi, J. Yasovanthi, M. Raghunath (2013). Maternal magnesium deficiency programmes the WNIN rat offspring in utero to altered adiposity. Abstracts of the 5th International Congress on Prediabetes and Metabolic Syndrome. *Journal of Diabetes*. 5: 158

#### **PAPERS PRESENTED AT INTERNATIONAL AND NATIONAL CONFERENCES**

1. **I.J.N. Padmavathi**, L. Venu, Y. Durga Kishore and M. Raghunath. Chronic dietary chromium restriction *per se* does not affect glucose tolerance, insulin resistance and reproductive performance in WNIN female rats. (Poster) 74<sup>th</sup> Annual meeting of Society of Biological Chemists (India) – 7<sup>th</sup> -10<sup>th</sup> November 2005, Lucknow, India.
2. **I.J.N. Padmavathi**, Y. Durga Kishore, L. Venu, K. Rajender Rao, Manisha Ganeshan, A. Krishnakanth and M. Raghunath. Effect of maternal chromium restriction on body adiposity, insulin response and glucose tolerance in male and

- female WNIN rats. (Poster) 5<sup>th</sup> Annual world congress on Insulin Resistance Syndrome (5WCIRS) – 10<sup>th</sup> - 13<sup>th</sup> October 2007, Boston, USA.
3. **I.J.N. Padmavathi**, K. Rajender Rao and M. Raghunath. Maternal Chromium (Cr) restriction irreversibly impairs muscle development in male & female rat offspring. (Poster) International Symposium on Dissecting the role of genes and environment in chronic diseases – 6<sup>th</sup> - 8<sup>th</sup> December 2007, at Centre for Cellular and Molecular Biology (CCMB), Hyderabad, India.
  4. **I.J.N. Padmavathi** and M. Raghunath. Effect of maternal chromium restriction on body adiposity, muscle growth, insulin response and glucose tolerance in male and female WNIN rat offspring. (Oral) Dr. K. V. Rao Scientific Society – 9<sup>th</sup> April 2008, Hyderabad, India.
  5. **I.J.N. Padmavathi**, L. Venu, Manisha Ganeshan, K. Anand Kumar, K. Rajender Rao and M. Raghunath. Effect of maternal chromium restriction on adiposity and insulin resistance in Wistar/NIN rat offspring. (Poster) 6<sup>th</sup> Indo-Australian Biotechnology Conference on Nutrition and life-course evolution of non-communicable diseases – 2<sup>nd</sup> - 4<sup>th</sup> September 2009 at Indian Institute of Chemical Technology (IICT), Hyderabad, India.
  6. Rajender Rao K, Venu L, **I.J.N. Padmavathi**, Manisha Ganeshan, Anand Kumar K and Raghunath M. Maternal Magnesium Restriction Induced increase in the Adiposity of WNIN Rat Offspring may be due to Increased stress and Fatty Acid synthasis. (Poster) 6<sup>th</sup> Indo-Australian Biotechnology Conference on Nutrition and life-course evolution of non-communicable diseases – 2<sup>nd</sup> - 4<sup>th</sup> September 2009 at Indian Institute of Chemical Technology (IICT), Hyderabad, India.
  7. K. Anand Kumar, **I.J.N. Padmavathi**, A. Lalitha, G. Manisha, K.R. Rao, J. Mahesh Kumar, G. Chandak, M. Raghunath (2010). Chronic maternal vitamin B12 restriction induced changes in the wistar rat offspring are partly correctable by rehabilitation: CMR e-journal.

### **NATIONAL SEMINARS / WORKSHOPS ORGANIZED / PARTICIPATION**

1. One – day Workshop on Bio Analytical Techniques held on 11th February, 2015 at Government College (Autonomous), Rajamahendravaram.

2. Two –day National Seminar on “Recent Trends in Applied Biology” held on 16<sup>th</sup> – 17<sup>th</sup> August, 2018 at Adikavi Nannaya University, Rajamahendravaram.
3. Two – day National Science Academies Lecture workshop on “Biological Diversity and Biotechnology for Sustainable Environment” held on 18<sup>th</sup> -19<sup>th</sup> December, 2018 at Adikavi Nannaya University, Rajamahendravaram.
4. Two – day National Science Academies Lecture workshop on “Metabolism – Concepts, Regulation and Applications” held on 10<sup>th</sup> -11<sup>th</sup> February, 2021 at Adikavi Nannaya University, Rajamahendravaram.

### **ADMINISTRATIVE WORK EXPERIENCE**

- Worked as coordinator for Placements, Training and Research Guidance Centre from 1<sup>st</sup> February 2016 to 25<sup>th</sup> October 2016 at Adikavi Nannaya University, Rajamahendravaram.
- Presently working as faculty associate for UGC Cell Coordinator.
- Working as criterion member in NAAC preparation.