

CURRICULUM VITAE



NAME: Trygve Magne Eikevik
YEAR OF BIRTH: 1955
NATIONALITY: Norwegian
POSITIONS: Professor
 Vice Head of Department, Education

UNIVERSITY: Norwegian University of Science and Technology (NTNU)
FACULTY: Engineering
DEPARTMENT: Energy and Process Engineering

EDUCATION

M.Sc.Eng: Norwegian Institute of Technology (NTH), Mechanical Engineering, December 1979,
 Master thesis: "Thermal Design of Constructions on Permafrost"

MAIN FIELD OF COMPETENCE

- Refrigeration and Heat Pump Systems
- High temperature Heat Pumps
- Snow making systems at ambient temperature above 0oC
- Energy Efficiency in Industrial Processes using Heat Pumps
- Enhanced Technologies in Heat Pump Assisted Atmospheric Freeze Drying -
- Fluid bed dryer in combinations with Microwave and Infrared heating, Mechanical and Ultra Sound Vibration

EXPERIENCE

Research:

1/1 - 2005 -->	Professor in Energy and Process Engineering at the Norwegian University of Science and Technology, with responsibility for environmentally friendly refrigeration and heat pump systems and product quality in the food engineering.
15/2-2018 →	Vice Head of Department – responsible of Education
1/3-2018 → 31/7-2020	Director of the Master's program in Production Design and Manufacturing (Mechanical Engineering)
1/7-2014 →	Director of the International Master program in Sustainable Energy
1/1 - 2005 --> 31/12-2015	Senior adviser (part time) at SINTEF Energi AS (SINTEF Energy Research)
1/8 - 2004 --> 31/12-2004	Associate Prof. II in Energy and process engineering within the food engineering area at the Norwegian University of Science and Technology (part time professor, 20% position)
1/4 - 2003 --> 31/12 - 2004	Senior Research Scientist, SINTEF Energy Research, Dep. of Energy Processes
1/1 - 1998 --> 31/03 - 2003	Research Director, SINTEF Energy Research, Dep. of Refrigeration and Air Conditioning
1/1 - 1996 --> 31/12 - 1997	Research Manager, SINTEF Energy, Dep. of Refrigeration and Air Conditioning
1/1 - 1995 --> 31/12 - 1995	Part time working (50%) at NTH, Dep. of Refrigeration and Air Conditioning as chief engineer. Responsibility: Administration of the department

15/9 - 1995 --> 31/12 - 1995	Head of section, SINTEF Refrigeration and Air Conditioning, Section: Refrigeration and Food Engineering
1/1 - 1988 --> 14/9 - 1995	Head of section, SINTEF Refrigeration and Air Conditioning, Section: Administration and Laboratory
1/1 - 1986 --> 31/12 - 1987	Research Engineer, SINTEF Refrigeration Engineering, Heat pump technology, Refrigeration engineering, Thermodynamics
1/1 - 1980 --> 31/12 - 1985	Research Engineer, Department of Refrigeration Engineering, NTH, Thermal design of constructions, Frost penetration in soil, Heat pump technology, Refrigeration engineering, Thermodynamics

EXPERIENCE

Lecturing:

Lecturing in a large number of courses on Master level at NTNU, with main focus on Refrigeration and Heat Pumping processes, Food Engineering.

Also being coordinator and giving lectures in 3 courses on PhD level

PhD courses:

EP 8206 Heat Pumping Processes in the Food Industry (PhD-course, 7.5 STP)

EP 8207 Advanced Dewatering and Drying Engineering (PhD-course, 7.5 STP)

EP 8208 Heat and Mass Transfer in Porous Media (PhD-course, 7.5 STP)

Supervisor of Master and PhD candidates (period from 2005 until now):

131 Master thesis candidates

13 PhD candidates

4 PostDocs

PROFESSIONAL MEMBERSHIP

Personal member of: IIR, IIR, ASHRAE, Norwegian Society of Refrigeration, National Delegate of IIR

AWARDS

Honorary Professor at Murmansk State Technical University.

Received 6 national and international awards.

PhD COMMITTEES

Have been opponent for 6 PhD candidates at international Universities

POSITIONS

Have been Chairman or member of the Board of Directors of 8 companies

ESTABLISHMENT OF COMPANIES

Have been active in establishment of 7 companies since 1995.

STEERING COMMITTEES FOR LARGER PROJECTS

Have been in the steering committee of 6 large projects funded by the Research Council of Norway running in the period from 2004 to 2018. Two new projects from 2018 to 2021.

ORGANIZING OF CONFERENCES

Organizing 15 international conferences and seminars as in the Organizing committee or in the Scientific committee

REVIEWER

- Reviewer of project proposals for the Research Counsel Norway (RCN)
- Reviewer of project proposal for Swedish Energy Agency
- International Journal of Refrigeration
- Energy
- Drying Technology - An International Journal
- Journal of Food Engineering

PUBLICATIONS

More than 150 publications/lectures in national and international conferences and seminars within the main field of competence

PROCEEDINGS

Editor of 12 CD-room proceedings for international conferences and seminars

PATENTS Five patents (filed: 1999, 1999, 2003, 2004, 2015)

Some selected publications:

Bamigbetan, Opeyemi Olayinka; Eikevik, Trygve Magne; Nekså, Petter; Bantle, Michael; Schlemminger, Christian. (2019) Experimental investigation of a prototype R-600 compressor for high temperature heat pump. Energy. vol. 169.

Bamigbetan, Opeyemi Olayinka; Eikevik, Trygve Magne; Nekså, Petter; Bantle, Michael; Schlemminger, Christian. (2019) The development of a hydrocarbon high temperature heat pump for waste heat recovery. Energy. vol. 173.

Jin, Zhequan; Hafner, Armin; Eikevik, Trygve Magne; Nekså, Petter. (2019) Preliminary study on CO₂ transcritical ejector enhanced compressor refrigeration system for independent space cooling and dehumidification. International journal of refrigeration. vol. 100.

Bamigbetan, Opeyemi Olayinka; Eikevik, Trygve Magne; Nekså, Petter; Bantle, Michael; Schlemminger, Christian. (2018) Theoretical analysis of suitable fluids for high temperature heat pumps up to 125 °C heat delivery. International journal of refrigeration. vol. 92.

Petrova, Inna; Tolstorebrov, Ignat; Eikevik, Trygve Magne. (2018) Production of fish protein hydrolysates step by step: technological aspects, equipment used, major energy costs and methods of their minimizing. International Aquatic Research. vol. 10 (3).

Wang, Ruzhu; Jin, Zhequan; Zhai, X.Q.; Jin, C.C.; Luo, W.L.; Eikevik, Trygve Magne. (2018) Investigation of annual energy performance of a VVW air Source heat pump system. International journal of refrigeration. vol. 85.

Bamigbetan, Opeyemi Olayinka; Eikevik, Trygve Magne; Nekså, Petter; Bantle, Michael. (2017) Review of Vapour Compression Heat Pumps for High Temperature Heating using Natural Working Fluids. International journal of refrigeration. vol. 80.

Jin, Zhequan; Eikevik, Trygve Magne; Nekså, Petter; Hafner, Armin. (2017) A steady and quasi-steady state analysis on the CO₂ hybrid ground-coupled heat pumping system. International journal of refrigeration. vol. 76.

Jin, Zhequan; Eikevik, Trygve Magne; Nekså, Petter; Hafner, Armin; Wang, Ruzhu. (2017) Annual energy performance of R744 and R410A heat pumping systems. Applied Thermal Engineering. vol. 117.

Wang, Yu; Lobaccaro, Gabriele; Carlucci, Salvatore; Wang, Ruzhu; Li, Yong; Finocchiaro, Luca; Dai, Yanjun; Eikevik, Trygve Magne; Wyckmans, Annemie. (2017) Sustainable Energy in Cities: Methodology and Results of a Summer Course Providing Smart Solutions for a New District in Shanghai. Energy Procedia. vol. 111.

Bengtsson, Peder; Eikevik, Trygve Magne. (2016) Reducing the global warming impact of a household heat pump dishwasher using hydrocarbon refrigerants. Applied Thermal Engineering. vol. 99.

Haida, M., Banasiak, K., Smolka, J., Hafner, A., Eikevik, T.M. (2016); Experimental analysis of the R744 vapour compression rack equipped with the multi-ejector expansion work recovery module. International Journal of Refrigeration

Eikevik, T.M., Tolstorebrov, I., Bantle, M. (2015); An overview of European and International safety standards related to use of natural refrigerants as working fluids for refrigeration and heat pump processes, 1st Nordic Baltic Drying Conference, Gdansk, Poland, June 17th to 19th 2015. ISBN 978-82-92739-09-9

Banasiak, K., Hafner, A., Haddal, O., Eikevik, T.M. (2014); Test facility for a Multiejector R744 Refrigeration System, 11th IIR Gustav Lorentzen Conference on Natural Refrigerants, September 2014, Hangzhou, China. ISBN: 978-2-36215-004-3, ISSN 0151.1637

Banasiak, K., Hafner, A., Eikevik, T.M., Haddal, O. (2014); CFD Case Study of R744 Ejectors, 11th IIR Gustav Lorentzen Conference on Natural Refrigerants, September 2014, Hangzhou, China. ISBN: 978-2-36215-004-3, ISSN 0151.1637

Tolstorebrov, I., Bantle, M., Hafner, A., Kuz, B., Eikevik, T.M. (2014); Energy Efficiency by Vapor Compression in Superheated Steam Drying Systems, 11th IIR Gustav Lorentzen Conference on Natural Refrigerants, September 2014, Hangzhou, China. ISBN: 978-2-36215-004-3, ISSN 0151.1637

For further information, please look at personal internet home page: <http://folk.ntnu.no/tme>