

PERSONAL
INFORMATION

SARA M. GABER

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WORK HISTORY

Jan 2022- Present

The Norwegian Institute of Food, Fisheries and Aquaculture Research (Nofima), Norway**Post-doc in Food and Health department**

- Drive work packages within Green Plant Food project to deliver new process, plant-based ingredients, and plant-based food products. Contribute to project writing proposals.
- Conduct experiments, generate data and disseminate results in line with the project objectives.
- Manage, build, and share the know-how with the industrial partners and the public. Answers to industrial partners project-related inquiries.
- Supervise interns, bachelor, or master students.

Key words: Dry-fractionation, low and high moisture extrusion of food materials, meat analogues, structural and texture characterization, rheology, process optimization, techno-functional properties of ingredients, pulse, cereals, food prototyping

August 2020-
Present**Royal DSM - Food Specialties, The Netherlands****Global Product Application Expert- Fresh Dairy Products & Probiotics**

working together with business and innovation managers, R& D, sales, and technical sales, as well as directly with customers. Duties:

- Drive work packages in collaboration with R& D, delivering new ingredients and blends in line with the requirements and specifications defined by business strategy.
- Initiate and drive projects developing new applications and/ or new ingredient blends for the market. Identify needs in the market together with the business and identify solutions.
- Support Sales in promoting and implementing new and existing products and applications with new and existing clients.
- Manage, build and share the know-how in the Fermented Milk Application field and to act as the technical expert in this field towards internal (Sales / Business) and external world (Customers/ Partners).

Jan 2018- Jan 2019

Norwegian University of Life Science, Ås- Norway**Leader of the Doctoral Candidates and Post-docs Organization**

Managed a board of 21 members working in academic, social, legislative and financial activities at the university. Successfully direct the organization to work for the best interest and well-being of 500+ PhDs and Post-docs at the university.

Sept. 2015-
Aug 2016**City of Scientific research and Technological Application, Egypt****Assistant Researcher in Food technology**

Investigate effect of natural plant extracts on aflatoxins

Jan- Sept. 2015

Chr. Hansen – Cheese Innovation R& D, France**Graduate researcher- Optimization of innovation in camembert cheese processing**

Plan, perform and report on trials made in the laboratory and in-house pilot dairy including:

- Production of dairy products in pilot dairy
- Analysis of dairy products with respect to sensory properties, pH, texture, HPLC, GC
- Microbiological analysis of yeasts, molds and cell counts in model systems.

Sept 2012 –
Aug 2013**Go Green Start-Up – CO-Founder****Ro2yaty Training Agency – Alexandria, Egypt**

Promoting Education for Sustainable Development Concept through B2C marketing. Responsibilities: managing budget & logistics. Follow up with team performance, organizing workshops, lead educational and brainstorming sessions.

EDUCATION

APR 2017- OCT
2020

PhD in Life and Food Science

Norwegian University of Life Science (NM BU), Norway Faculty of Chemistry, Biotechnology and Food Science

Thesis title: Mineral balance of microfiltered casein concentrates undergoing processing for dairy applications.

keywords: Minerals, protein, membrane filtration, milk ingredients, processing, chemistry, pilot scale production, dairy products, rheology, sensory analysis

Sep 2013- Jul
2015

M Sc in Food Innovation and Product Design

AgroParisTech. Paris, France

Products and Process Engineering (unit operations, food process engineering, prototype development and evaluation, technology and innovation management.

Dublin Institute of Technology. Dublin, Ireland

Culinary Innovation and Food Product Development- Marketing communication – Consumer behavior- Food business creation.

Sep 2008- Jul
2012

BSc. of Agricultural Science in Dairy Science and Technology

Faculty of Agriculture – Alexandria University. Alexandria, Egypt

Thesis: "Kefir: between traditional and Industrial production methods- An Isolation and identification of Serbian Kefir grains microbiota and production of culturally fit prototype"

- Analysis of Kefir grains (biochemical and microbiological)
- Isolation of yeasts and identification
- Production of a prototype using commercial starter and isolated yeasts

TRAINING & INTERNSHIPS

Jan - Feb 2013

Laboratory of the Microbial Biochemistry of Dairy Microorganisms

Faculty of Agriculture, Alexandria university

Objective "The influence of freezing and freeze drying on the intercellular enzymatic and autolytic properties of some bacterial strain" - Biochemical and enzymatic analysis

Aug-Sep 2011

Meknes canned company "AICHA" - Morocco.

Production line service: quality control management of tomatoes from reception to final canned product. Performing microbiological and biochemical analysis.

Jul – Aug 2010

University of Sfax- Tunisia

Visit to facilities of: Olive Tree Institute, Higher Institute of Biotechnology, ElRahma Milk Collection Center in Sfax and Higher Institute of Agriculture Science of Chott Mariem in Sousse

Jun- Jul 2009

ESIAM- Saint Joseph University. Taanail, Lebanon Jarjoura Dairy. Al Bequaa, Lebanon

Manufacture and packaging of traditional Lebanese cheeses (kashkaval, labneh, halloumi)

Performing daily farming duties.

SKILLS

LANGUAGES

English and French: Proficient user **Norwegian:** intermediate user **Arabic:** Native speaker

IT skills

Microsoft Office Package, R Studio, MINITAB, MATLAB (basic), CRM , Power BI

Awards

IHES Scholarship - For IFHE Congress participation, July-August 2016

ERASM US M UNDUS Scholarship- From 2013 to 2015

AUF Undergraduate Scholarship- Internships in 2009, 2010 and 2011

INTERPERSONAL

Extrovert. Excellent communicator and public speaker- managing teams in harmony and conflict solver- responsible. Work independently and in groups. Organized. Excellent negotiator and active listener. Easy adaptable, fast learner and flexible thinker

REFERENCES

Provided upon request.

Gaber, Sara M; Knezevic, Dejan; do Carmo, Cátia Saldanha; Zobel, Hanne; Knutsen, Svein Halvor; Sahlstrøm, Stefan; Dessev, Tzvetelin. Meat Analogues from Pea Protein: Effect of Different Oat Protein Concentrates and Post Treatment on Selected Technological Properties of High-Moisture Extrudates. *Applied Sciences* 2023; Volume 13.(22) s. 1-15

do Carmo, Cátia Saldanha; Rieder, Anne; Varela, Paula; Zobel, Hanne; Dessev, Tzvetelin; Nersten, Solveig; **Gaber, Sara M;** Sahlstrøm, Stefan; Knutsen, Svein Halvor. Texturized vegetable protein from a Faba bean protein concentrates and an oat fraction: Impact on physicochemical, nutritional, textural, and sensory properties. *Future Foods* 2023; Volume 7.s. 1-13

Gaber, S.M., Johansen, A.G., Devold, T.G., Rukke, E.O. and Skeie, S.B., 2020. Manufacture and characterization of acid-coagulated fresh cheese made from casein concentrates obtained by acid diafiltration. *Journal of Dairy Science* 104 (6), 6598-6608.

Gaber, S.M., Johansen, A.G., Devold, T.G., Rukke, E.O. and Skeie, S.B., 2020. Minor acidification of diafiltration water using various acidification agents affects the composition and rennet coagulation properties of the resulting microfiltration casein concentrate. *Journal of Dairy Science* 103 (9), 7927-7938 (open access)

Gaber, S.M., Johansen, A.G., Schüller, R.B., Devold, T.G., Rukke, E.O. and Skeie, S.B., 2020. Effect of freezing temperatures and time on mineral balance, particle size, rennet and acid coagulation of casein concentrates produced by microfiltration. *International Dairy Journal*, 101, p.104563. (open access)

Rukke, Elling-Olav; **Gaber, Sara M.;** Skeie, Siv Borghild; Devold, Tove Gulbrandsen; Johansen, Anne-Grethe; Schüller, Reidar Barfod. Influence of freeze storage on rheological properties in Quark. *Annual Transactions - The Nordic Rheology Society 2020*; Volume 28. s. 119-123

Gaber, S. M., Johansen, A. G., Skeie, S. B., Rukke, E. O., & Schüller, R. B., 2019. Analysis of rheological time series data. *Annual Transaction of the Nordic Rheology Society*, 27, p.127-131.

CONFERENCES

Gaber, Sara M; Knezevic, Dejan; do Carmo, Cátia Saldanha; Knutsen, Svein Halvor; Dessev, Tzvetelin. High-moisture extrusion of Pea Protein: Effect of Different Oat Protein Concentrates and Post Treatment of meat analogues on Selected Technological Properties. **37th EFFoST International Conference 2023- Poster**

Dessev, Tzvetelin; **Gaber, Sara M.;** Knutsen, Svein Halvor. Optical determination of the fiber orientation and anisotropy in high-moisture meat analogues. *International Congress on Engineering and Food (ICEF14) 2023-06-21- Poster*

do Carmo, Cátia Saldanha; Mecha, Elsa; Oliveira, Juliana; Schmidt, Gesine; **Gaber, Sara M.;** Knutsen, Svein Halvor; Sahlstrøm, Stefan; Bronze, Maria Rosario; Serra, Ana Teresa. Phenolic composition and antioxidant capacity of pea- and oat-based expanded snacks produced by extrusion. **Dare 2 Change**, Innovation-Driven Agrifood Business; 2023-03-21- **Poster**

do Carmo, Cátia Saldanha; Mecha, Elsa; Oliveira, Juliana; Schmidt, Gesine; **Gaber, Sara M;** Knutsen, Svein Halvor; Sahlstrøm, Stefan; Bronze, Maria Rosario; Serra, Ana Teresa. Phenolic composition of snacks based on pea protein, pea starch an oat beta-glucan-rich fraction. **4th International Conference on Food Bioactives and Health; 2023- Poster**

Jamal, Nimra; **Gaber, Sara M.;** Knutsen, Svein Halvor. Hydrocolloid Interaction with Extruded Materials in Processed Plant-Based Food Products. *FIPDes Day 2023 - FIPDes- Poster & Master thesis*

do Carmo, Cátia Saldanha; Mecha, Elsa; Oliveira, Juliana; Schmidt, Gesine; **Gaber, Sara M;** Sahlstrøm, Stefan; Knutsen, Svein Halvor; Bronze, Maria; Serra, Ana Teresa. Impact of low-moisture extrusion on health-related properties of snacks based on pea and oat ingredients. *1st International Congress on Food, Nutrition and Public Health – Towards a Sustainable Future (ICFNH2022) - Poster*

Garbers, Philipp; **Gaber, Sara M.;** Brandal, Hans A.; Tsjokajev, Ahmad; Tyl, Catrin; Knutsen, Svein Halvor; Westereng, Bjørge. Extraction of Raffinose Family Oligosaccharides from Pulse derived Fractions and their Application in Fermentations. **36th EFFoST International Conference 2022- Poster**

Gaber, S. M., Johansen, A. G., Skeie, S. B., Rukke, E. O., & Schüller, R. B., 2019. Analysis of rheological time series data. **Nordic Rheology Conference 2019- Oral presentation**

Gaber, S.M., Johansen, A.G., Schüller, R.B., Devold, T.G., Rukke, E.O. and Skeie, S.B., 2020. Effect of freezing temperatures and time on mineral balance, particle size, rennet and acid coagulation of casein concentrates produced by microfiltration. **The 11th NIZO Dairy Conference on Milk Protein Functionality 2019- Poster**