

Your packaging. More potential.

The Sustainable Packaging Initiative and scientific advisory services for packaging optimisation for companies across a wide range of industries.



AI-generated concept image: material diversity, the bioeconomy and technology. Not an actual client application.

Where can you reduce material use and costs? Which alternative provides the protection you need? And what data does your team require to prepare a well-founded packaging change?

01 Expert talks - An informed view of material trends, the bioeconomy and sustainable packaging.

02 Tailored seminars - Combine 52 topic modules into your own one- or two-day learning programme.

03 Packaging review - Scientific advisory services for packaging optimisation: analyse and assess opportunities on site.

04 In-house workshops - Connect expert input, your own packaging examples and practical next steps.

Across industries: manufacturing, technical products, consumer goods, the packaging industry and food. Including applications beyond the life sciences.

Assess together. Move forward with purpose.

Scientific expert talks and facilitated discussion connect current knowledge with your own packaging examples.

Procurement, development, production, quality and logistics bring their perspectives together. The focus is an agreed selection of your packaging, with clear questions and the data available.

01 Understand the requirements

Bring the product, protective function, transport, storage, processing and cost framework together in a shared packaging profile.

02 Assess material alternatives

Compare fibre-based materials, paper, paperboard, cardboard, plastics, glass and metals against the required functions. Make trade-offs and data quality transparent.

03 Make the benefits measurable

Define suitable indicators: for example, material mass per packaging unit, cost per protected product, reject rates or transport damage.

04 Prioritise the next steps

Rank improvement options by benefit, effort, risk and available evidence. Record open questions, responsibilities and the next testing steps together.

One day: a shared knowledge base, selected case studies and priorities.

Two days: deeper exploration, further case work and a more detailed trial plan.

Optional addition: a preliminary packaging review or scientific advisory services for packaging optimisation.

Preparation, the number of examples and the documentation of results are agreed in the proposal. An interdisciplinary core team of around 6 to 12 people is a useful starting point for joint case work.

Packaging review. See on site. Assess with evidence.

A service available independently for companies seeking scientific support to improve their packaging.

As your scientific adviser, I analyse the interplay between material, product and process. A site visit provides observations; the literature, material data and your available operational data form the basis for the subsequent assessment.

Where we look for opportunities

Overspecified wall thicknesses and formats, unnecessary empty space, material variety, cushioning, material losses, handling, and storage and transport requirements. Product protection and process capability are considered throughout.

A prioritised overview of opportunities

Observations and improvement options, with their operational relevance, underlying assumptions and remaining uncertainties.

A transparent scientific assessment

Suitable methods and comparison conditions for material requirements, protective function, costs and environmental impacts.

Quantifiable benefits

Estimate material and cost effects as reliably as the data allow. Identify data gaps explicitly.

Recommendations and testing needs

Identify next steps, the evidence required and suitable investigations; explain the findings in a joint review discussion.

Typical scope: one day on site for an agreed area. Preparation, evaluation and documentation are tailored to the question. Available independently or in combination with a seminar or workshop.

The service comprises scientific analysis and assessment. Laboratory services, certifications and binding packaging approvals are not included. Research collaborations and research services are discussed in my main role at SPI.

The right topics. For your team.

52 modules of approximately 20 to 90 minutes. Start with a seminar suggestion or build your own programme of expert sessions.

Fundamentals & informed decisions · 5 modules

Understanding packaging as a system · From product characteristics to packaging requirements · more topics

Packaging materials & structures · 9 modules

Comparing packaging material families · Paper, board, cartonboard and moulded fibre · more topics

Protective functions & processes · 7 modules

Permeation and barrier properties explained · Specifying the barrier performance actually needed · more topics

Sustainability & the bioeconomy · 8 modules

Making sense of sustainability terminology · Understanding the technical basis of recyclability · more topics

Regulations & supporting evidence · 4 modules

PPWR: an overview for packaging professionals · Food contact: fundamentals and interfaces · more topics

Food & shelf life · 6 modules

Food spoilage and packaging protection · Modified atmosphere and vacuum packaging · more topics

Industry, procurement & logistics · 6 modules

Packaging technical products and components · Empty space, cushioning and packaging size · more topics

Project work & practical application · 7 modules

Setting up a packaging change project · Clarifying interfaces and responsibilities · more topics

One or two days: up to 315 minutes of topic modules per day, 45 minutes for introduction, discussion and application, plus 60 minutes of breaks. Content and depth are adapted to prior knowledge and objectives.

Choose your topics: www.foodinnovations.de/en/seminar-builder.html

Practice. Science. Commercial insight.



Prof. Dr. Markus Schmid

My career combines skilled-trades practice, business management and applied packaging research. These perspectives shape my talks, seminars and scientific advisory services for packaging optimisation.

In my main employment, I am Professor of Process Engineering and Process Design and Director of the Sustainable Packaging Institute SPI at Albstadt-Sigmaringen University.

Master butcher (Fleischermeister), qualified vocational trainer

Practical operations and clear communication: ideas must work in day-to-day production.

Business management qualification for the skilled trades (Betriebswirt des Handwerks)

Commercial viability: assess material costs, effort, waste and changeover requirements together.

Dipl.-Ing. (FH), Food Technology · M.Sc., Food Processing

Applied science: define requirements and check the benefits using suitable performance indicators. The German engineering diploma was awarded by a university of applied sciences.

Doctorate at the Chair of Food Packaging Technology, Technical University of Munich

Scientific depth: critically assess data, material properties and studies; distinguish assumptions from evidence.

Fraunhofer IVV · material development and biopolymers

Connecting research with industrial applications: from the material concept and testing to process requirements.

Professor of Process Engineering and Process Design

Main employment at Albstadt-Sigmaringen University: process insight, structured teaching and interdisciplinary perspectives.

Director of the Sustainable Packaging Institute SPI

Institute leadership in my main employment: putting sustainable packaging, the bioeconomy and the interplay of different materials into context.

Portrait: © KREATIV KOMPANIE GmbH. Career information based on the supplied curricula vitae.

Your packaging question. Our next conversation.

For an initial discussion, simply share your industry, the question you want to address, the intended audience and your preferred timeframe. This is the starting point for an individual proposal with a clearly defined scope.

Prof. Dr. Markus Schmid · Food Innovations - and beyond

Royst. 19 · D-72488 Sigmaringen · Germany

Telephone: +49 7571 929 7248

markus.schmid@foodinnovations.dewww.foodinnovations.de/en/

Independent freelance activity alongside my main employment

The services presented in this document are offered through my independent freelance activity alongside my main employment, under the name Food Innovations. I provide them under my own responsibility and on my own account. The university and research roles mentioned explain my professional background; the university and SPI are not the providers or contracting parties for these services.

The offering is limited exclusively to scientific activities and lecturing activities that I perform personally within the meaning of section 63(1), no. 3 of the Baden-Württemberg Civil Servants Act (Landesbeamtengesetz, LBG). These include the expert talks, seminar and workshop formats, and scientific advisory services for packaging optimisation described here. Services outside this scope that require approval are not included in this offering.

I notify my supervising authority of each planned paid secondary activity in good time before it begins, in accordance with the applicable notification requirements (section 63(2) LBG).

I am happy to discuss research collaborations and research services in my main role at Albstadt-Sigmaringen University. Such services are not offered through Food Innovations. Further information and contact details are available from the Sustainable Packaging Institute SPI (university website).

Regulatory topics cover the fundamentals and their technical interfaces. Case-specific legal advice is not part of the seminars.