# VARYO Connecting Curiosity

# Sponsorship Dossier

anis space to grow BEINICK&JO

VARYO

# VARy YOur view on Science

# Vision and Mission of VARYO

### VISION

"We want to spark curiosity and connect a global community of learners, researchers, and innovators, motivating them to explore, apply, and advance scientific discoveries for a brighter, more innovative future."

### MISSION

"To connect exploratory minds with the wonders of applied science by producing captivating, insightful videos that foster deeper understanding and inspire to discuss and exchange knowledge of real-world scientific challenges."



### LEARNERS



### ACADEMIA



### START - UPS



VARYO

### INDUSTRY





# What is the project exactly about? <u>Watch our Concept</u> <u>Video</u> and <u>Rockets Trailer</u> on YouTube.



# Unique Selling Points (USPs)



#### Education+Swissness

Unique, freely available videos that represent a combination of high quality scientific videos focusing on BOTH theory AND experiments. In addition, we present research by academics, start-ups and industrial companies, which is a niche project.

#### Scientainment

Modern and humorous presentation style; generation of curiosity using different social media platforms (Youtube, Instagram, Tiktok, www.varyo.ch)

#### Commitment

Creative integration and connection of followers and scientific community by exchange on our website. Registered users are able to post comments and files about video content.

#### Variety+Visibility

Combination of many different fields and topics (industry, history, arts, sports, ...) with science in an innovative way; 100% transparency, progress visibility online in real-time

## Types of Videos and Projects of VARYO

#### The Science of Everyday Life

Applied Science videos

#### The Art of Experimenting Pure experimental videos





-documentaries and video podcasts about exciting projects in academia, the start-up scence and industry; for instance, we have a partnership with ARIS at ETH Zurich (see page 10 for more details) presenting their fascinating research and ongoing projects

-estimated time per video 1 - 2 months
- the focus here will be on the researchers and the scientific projects they are currently working on
- my role will be to act as an interviewer and project

Cutting-edge Research

**Documentary videos** 

aris

space to grow

**ETH** zürich

coordinator to provide a platform for these promising scientists to communicate and promote their projects. -various forms of partnerships are possible here. Don't hesitate to contact us!

-aesthetic experimental videos about different topics in science with an emphasis on chemistry and physics

-estimated time per video 0.5 - 1 month

-experimental videos serve to deliver regular content and help students to connect theory and empiricism with active participation of our community into scientific topics

-structure of the videos: high quality presentation of specific experiments with an innovative 3-step approach
1. We present the practical part of the experiment on different social media channels. 2. Our community has the

opportunity to discuss and evaluate the experiment on our website. 3. Filming of the evaluation part of the video integrating and discussing inputs of our community.

-the royal form of videos; estimated time per video 1-3 months
-applied science videos represent the backbone of our project
-you will find a selection of possible applied science topics on the following slides; the choice and the order of the topics are flexible and are not complete; we are also open to inputs from sponsors or partners about topics that are not listed yet
-our goal is to neutrally present and discuss phenomena and products of our daily life with emphasis on raising curiosity
-structure of the videos: mix of historical, experimental and evaluation parts; may include educational parts (we aim to explain phenomena mostly with concepts learned in school)
-may include visits of certain institutions such as museums,

universities, companies, exhibitions, etc.

# Two specific examples of topics for Applied Science Videos

#### Fireworks and Rockets ≈ 10 videos





1	History of pyrotechnics/fireworks and survey about the fascination of fireworks
2	Experiments to show colors and sparkling effects of fireworks
3	Experiments to show sound effects of fireworks; deflagration vs. detonation
4	Innovative, novel experiment to combine color and sound effects of fireworks
5	History of rockets and Swiss participants in space programmes
6	Physical and mathematical principles of rockets with experiments
7	Self-made amateur rockets in the laboratory
8	"Semi"-professional academic rockets (ARIS), Master of Space Systems, ETH Zur
9	Production of professional rockets (Rocket factory Augsburg)
10	Professional rocket and space programmes (NASA, ESA, SpaceX)

1	History of latex and rubber; discrimination between natural and synthetic rubber	
2	Experiments to show properties of rubber in the laboratory	
3	The chemistry behind: Polymerization, copolymerization and vulcanization reactions	
4	Academic research about latex- or rubber-related topics.	
5	Visit of rubber processing companies (e.g. Dätwyler AG)	
6	Applications I: Car and truck tires (visit of e.g. AMZ racing)	
7	Applications II: Puck in ice hockey, interview with hockey players from NLA	
8	Applications III: Different types of balloons	
9	Applications IV: Rubber seals in e.g. Nespresso capsules, cars or medical applications	
10	Sustainability problems with rubber; latex allergy; nitrosamines,	

# List of other subject areas for Applied Science videos



-criminal series in Sherlock -hygroscopic magnesia in Holmes manner gymnastics and climbing  $\rightarrow$  analysis of traces in the -aerodynamics and weight in chemicallaboratory bicycles (Aero-bike, CFD) and cars -cinematic approach -running shoes (e.g. Vaporfly) -fluid dynamics in swimming (e.g. -e.g. arson attack, the case of the poisoned wine, metal poisoning, mystery powder, -GPS tracking in football drowning victim -historical and modern doping -chemical weapons and spy -alcohol abuse in shooting gadgets -analytical chemistry (visit of -all about sports nutrition, protein forensic institute in Zurich)

LZR Racer suit)

disciplines

and amino acid shakes

-age determination of wines -staining of black olives - molds and bacteria in food -radioactivity in food -terrible smells of food -process of decaffeination -how to produce coffee, beer ... -salt mines (Bex, Rheinsalinen) -sugar production (Aarberg, Frauenfeld) -production of chocolate -all about milk and production of milk products

-explosives and fertilizers: history -documentary about products and companies within these two fields production of plastics and polymers -"used look" jeans, how is it made? -applications of memory metals; metallurgy products -recycling, sustainability -natural ressources in Switzerland; visit of companies in this field -chemistry in construction (concrete admixtures, special mortars, sealants and adhesives, floor coatings,...)

-vitamin tablets, food supplements -producing your own perfume -everyday encounters: fluoride in tooth paste, iodized salt, mechanisms of pain killers, function of cough suppressants, antibiotics, shampoo, hair conditioner,... -mechanism of weight loss medication (e.g. Ozempic, Wegovy, CT-388) -biotherapeutics and start-up companies, therapeutic antibodies vs. alternative scaffolds, vaccines, ...

-drugs such as darth vader or fentanyl -diabetes, cancer (radiochemisty, PET...)

# Partnership with ARIS (<u>https://aris-space.ch</u>)



ARIS (Akademische Raumfahrt Initiative Schweiz) was founded in August 2017 by a group of enthusiastic students in a classroom at **ETH Zurich**. ARIS combines the strengths of the Federal Institute and the Universities of Applied Sciences, bringing the excellence of the Swiss education system to the world. Physically located at ETH Zurich, ARIS is integrated into **ETH Zurich, HSLU, OST, the University of Zurich and ZHAW** through its about 600 student members, academic projects and direct support. It is a non-profit, non-military association with the aim to educate students in practical project work and to shape the perception of space in a sustainable way. Created by students for students, ARIS stands for ambition and Swiss pioneering spirit.

#### **Our contribution as partner of ARIS**

We will create video documentaries about ongoing ARIS projects and present them on the websites and social media channels of ARIS and VARYO. A small video documentary about Project Nicollier, which was completed in November 2024, has already been produced and will be released soon. Your support for us is also a vote of confidence in ARIS and its partner universities!

### Seed phase (5 years)

POC (proof of concept)
 -at least 30 high quality videos

 -all video types: applied
 science videos, experimental
 videos and documentaries
 first stage financing
 ca. 700`000 SFr

# Timeline



### Steady growth

 revenues via product placements, social media and partnerships should optimally cover expenses
 donations on website - all types of videos



### Growth phase (3 years)

2

 boosting follower numbers with innovative video series filmed in Switzerland as well as internationally
 continuation with applied science videos but focus on experimental videos and documentaries

 second round financing



3

# Visibility of Sponsors



#### Youtube Instagram

### n TikTok

LinkedIn

All Sponsors will be included in our videos (start and end) with special emphasis on main sponsors. We will also be approaching local Swiss companies involved in certain topics and making video documentaries. Sponsors will be prioritised in the selection process. Additionally, we will make use of different types of social media. There is also the option of making product placements during the videos. If you have any individual wishes and ideas, please get in touch with us!

#### Website

All our sponsors will be mentioned on our website www.varyo.ch with additional possibilities of product placements.

### Publications

All our main sponsors will be mentioned in our publications (e.g. when we create a new type of experiment), for example in the Journal of Chemical Education.

## The Team and Distribution of Tasks



### Dr. Mark Bauer

Founder of VARYO. Project leader and responsible for design, execution and evaluation of experiments as well as all scientific contents. Also responsible for all administrative work and project coordination.

### Ben Wild

Responsible for filming, 2D animations as well as film editing.

### Nick Funke

Responsible for filming and 3D animations

### Tim Ziegler

Responsible for filming and drone pilot

### Joshua Arnold

Responsible for design and maintenance of website and social media

# Provided and Necessary Material and Funds

#### Provided infrastructure and material

The Kanton of Uri generously provides the **laboratory infrastructure** and **standard chemicals** for our experiments (chemical laboratory of Kantonale Mittelschule Uri).

Bennick&Jo provide the basic **camera material**, **computer hardware**, **software** as well as a **drone** for filming and film editing.

The KMSU physics group has kindly agreed to permit shared use of their **high-speed camera**.

#### Necessary material and funds

The biggest cost driver of the project is **salaries**. These will be paid on an **hourly basis (30 SFr/h for the film team and 50 SFr/h for the project leader)** as it is difficult at the moment to determine which parts of the film team will take most time. **If necessary we cover gaps with freelancers that we pay as well on an hourly basis**.

Additionally, we need to order **special**, **subject-dependent chemicals** and **laboratory equipment**.

Furthermore we need additional **memory cards** and **external hard drives** as well as new **hardware** or if it has to be replaced

As we consider all national as well as international sources of information we will generate as well travel costs (visit to museums, universities, companies, exhibitions, ...)

It is challenging to ascertain the precise financial requirements for the next five years. The work will be carried out in phases, with not all members involved at all times (except the project leader). It may also be necessary to arrange interim financing. In the event that we generate a surplus of funds in the start-up phase, these funds will then be allocated to the growth phase.

## Seed Phase: Estimated Budget (for 5 years)

Expenses (over a period of 5 years)	CHF	Revenues (over a period of 5 years)	CHF
Salaries Filming and film editing: 2D/3D animations: Website and social media: Science, administration, coordination:	5 x 28`800 = 144`000 5 x 28`800 = 144`000 5 x 14`400 = 72`000 5 x 48`000 = 240`000	Institutional and personal contributions Rent, water, electricity, service, cleaning,: Standard chemicals: Laboratory material (usage, wear material): Cameras and camera equipment: High-Speed camera:	$5 \times 12^{\circ}000 = 60^{\circ}000$ $5 \times 1^{\circ}500 = 7^{\circ}500$ $5 \times 1^{\circ}000 = 5^{\circ}000$ $1 \times 5^{\circ}000 = 5^{\circ}000$ $1 \times 8^{\circ}000 = 7^{\circ}500$
Laboratory and scientific material		Licenses software:	5 x 1`000 = 5`000
Rent, water, electricity, service, cleaning,: Standard chemicals: Laboratory equipment (usage, wear material): Special topic-dependent chemicals: Special laboratory equipment:	$5 \times 12^{\circ}000 = 60^{\circ}000$ $5 \times 1^{\circ}500 = 7^{\circ}500$ $5 \times 1^{\circ}000 = 5^{\circ}000$ $5 \times 3^{\circ}000 = 15^{\circ}000$ $5 \times 5^{\circ}000 = 25^{\circ}000$	Sponsors Platinum Sponsor: Gold Sponsor: Silver Sponsor:	300`000 200`000 2 x 100`000
		Total re	evenues: 790`000
High-Speed camera:	$1 \times 5 \ 000 = 5 \ 000$ $1 \times 7 \ 500 = 7 \ 500$		
Licenses software: Travel camera for filming abroad + equipment: Licenses music and website costs: Requisites:	5x 1`000 = 5`000 1x 2`000 = 1`500 5x 1`000 = 5`000 1x 3`000 = 3`000	Your support will make a significant impact on the success of our project! We guarantee the highest quality work, delivered with 100% passion, and aim to spark curiosity about scientific	
Travel expenses and admission costs		questions among a diverse range of individuals, including young people and adults. Different amounts of funds (more or less) are	
Travel to companies, museums, universities,: 5 x 10`000 = 50`000		feasible as well. Don`t hesitate to contact us to discuss how	
Total	l expenses: 790`000	you can support our project, for example also as you have any general questions about the project	s a partner, or if ct.

## **Contact Details**

### Dr. Mark Bauer

Founder of VARYO Project Leader and Principal Scientist

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### Bank account details

Mark Bauer Raiffeisenbank Horw IBAN: CH36 8080 8004 1571 3340 3

Business account coming soon.