

NIZHNY NOVGOROD STATE TECHNICAL  
UNIVERSITY NAMED AFTER  
R.E. ALEKSEEV

**The Institute of Physical and  
Chemical Technologies and Material  
Science**

The presentation was made  
by the student of M17-ЛМГР  
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НИЖЕГОРОДСКИЙ ГОСУДАРСТВЕННЫЙ  
ТЕХНИЧЕСКИЙ УНИВЕРСИТЕТ  
им. Р. Е. Алексеева

# VADER SYSTEMS

# VADER



LIQUID METAL 3D PRINTING



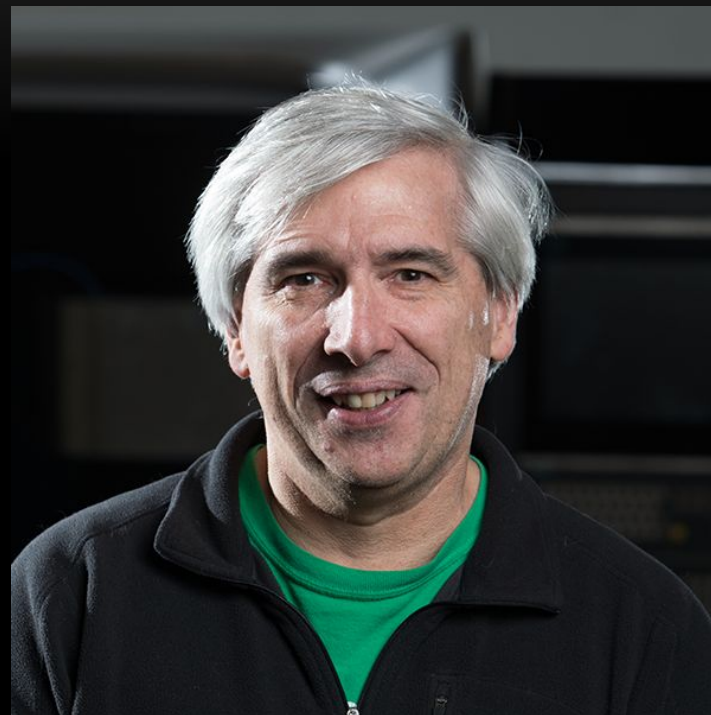
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им. Р. Е. Алексеева

# WHO?



**Zachary Vader**

**Chief Innovation Officer**



**Scott Vader**

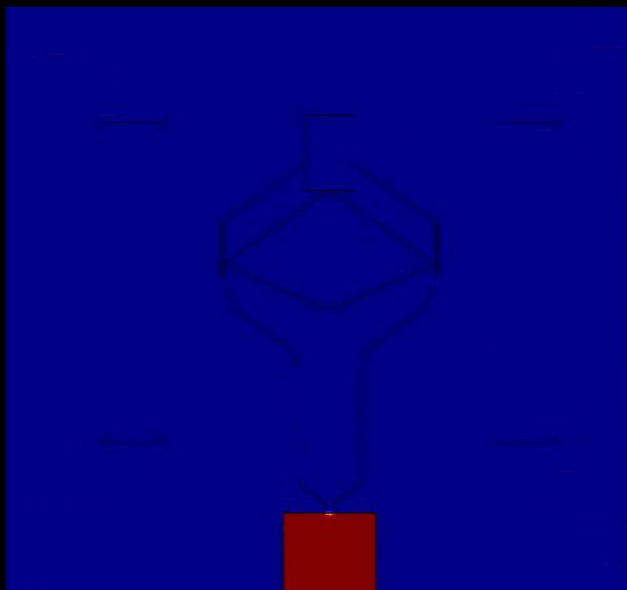
**Chief Executive Officer**



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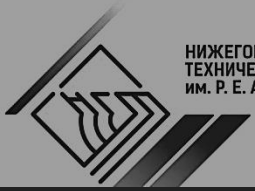
# WHAT?

MagnetoJet technology



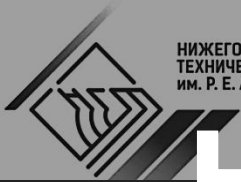
The MK1





# WHAT FOR?

- to create new possibilities in high tech material construction;
- to bring affordable metal printing systems into the commercial market;
- to challenge current metal 3D printing solutions by providing an industrially powerful machine built practically and for production;
- to offer accessibility both on price and ease of use.



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# HOW DOES IT WORK?





# BENEFITS

*high part density*

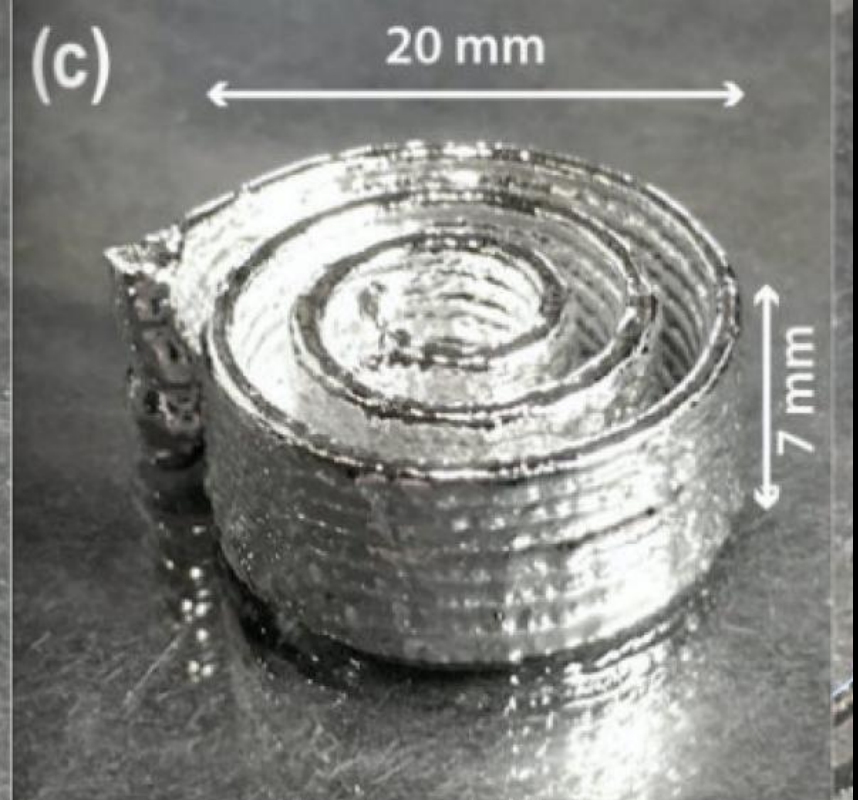
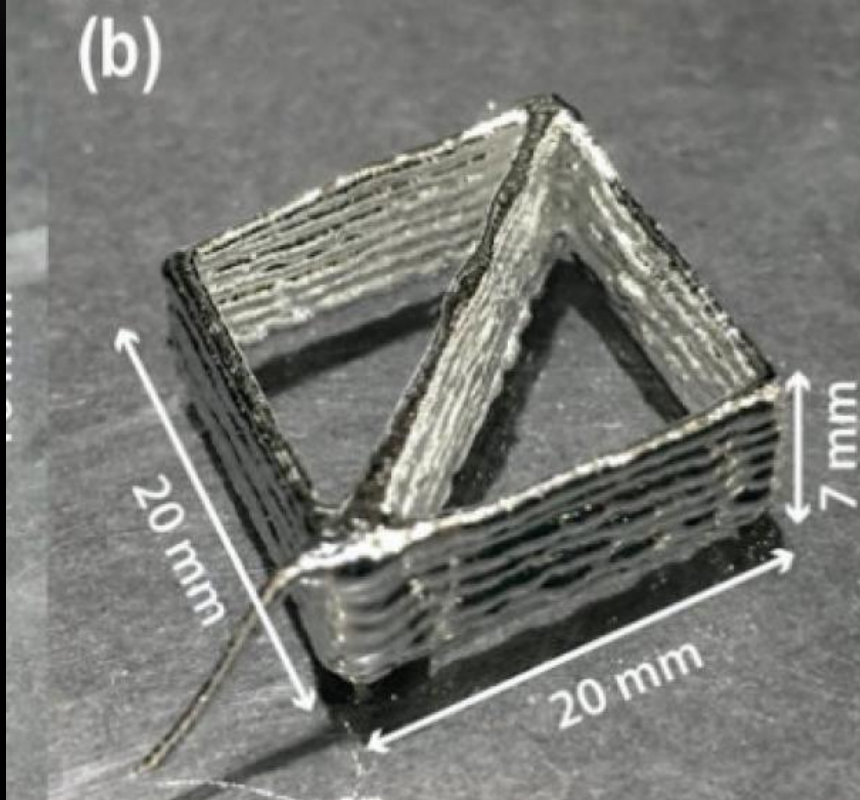
*easy to use*

*high speed metal  
melting*

*affordable price*



# BENEFITS







# DRAWBACKS

Influence of many uncertain factors,  
which impose a significant challenge to  
the jetting process stability and product  
quality



# WHERE VADER SYSTEMS IS GOING

The next products will:

- be able to use higher temperature metals like copper, brass, and gold;
- be able to print more than 5 pounds of aluminum per hour;
  - have 10 print heads



# WHERE IT MAY BE USED

- for small businesses, engineering firms and other professional makers;
  - in medicine;
- for the automotive industry;
  - and so on.



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THANKS FOR YOUR  
ATTENTION