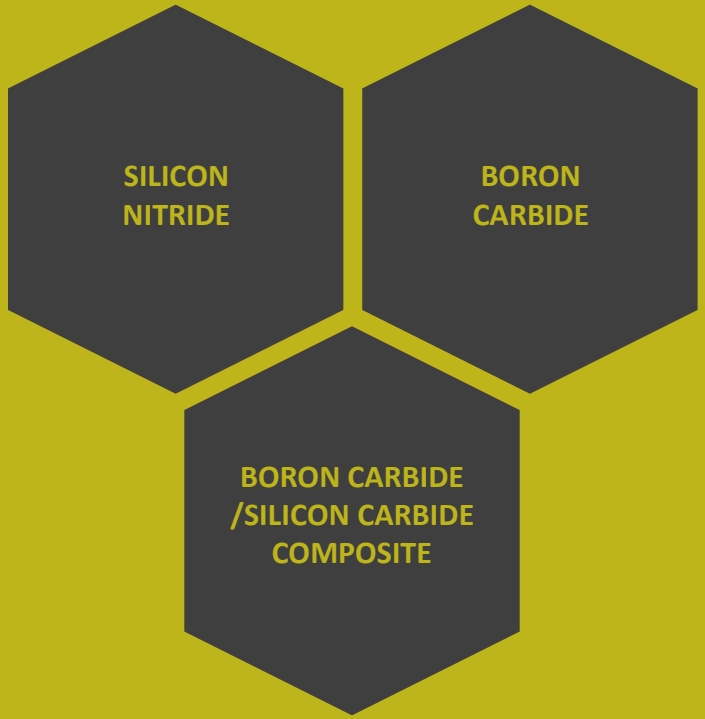
CORPORATE OVERVIEW

March 2022

WHO IS SINTX TECHNOLOGIES?

Salt Lake City – based advanced materials company that is focused on the manufacturing and development of advanced ceramic products.

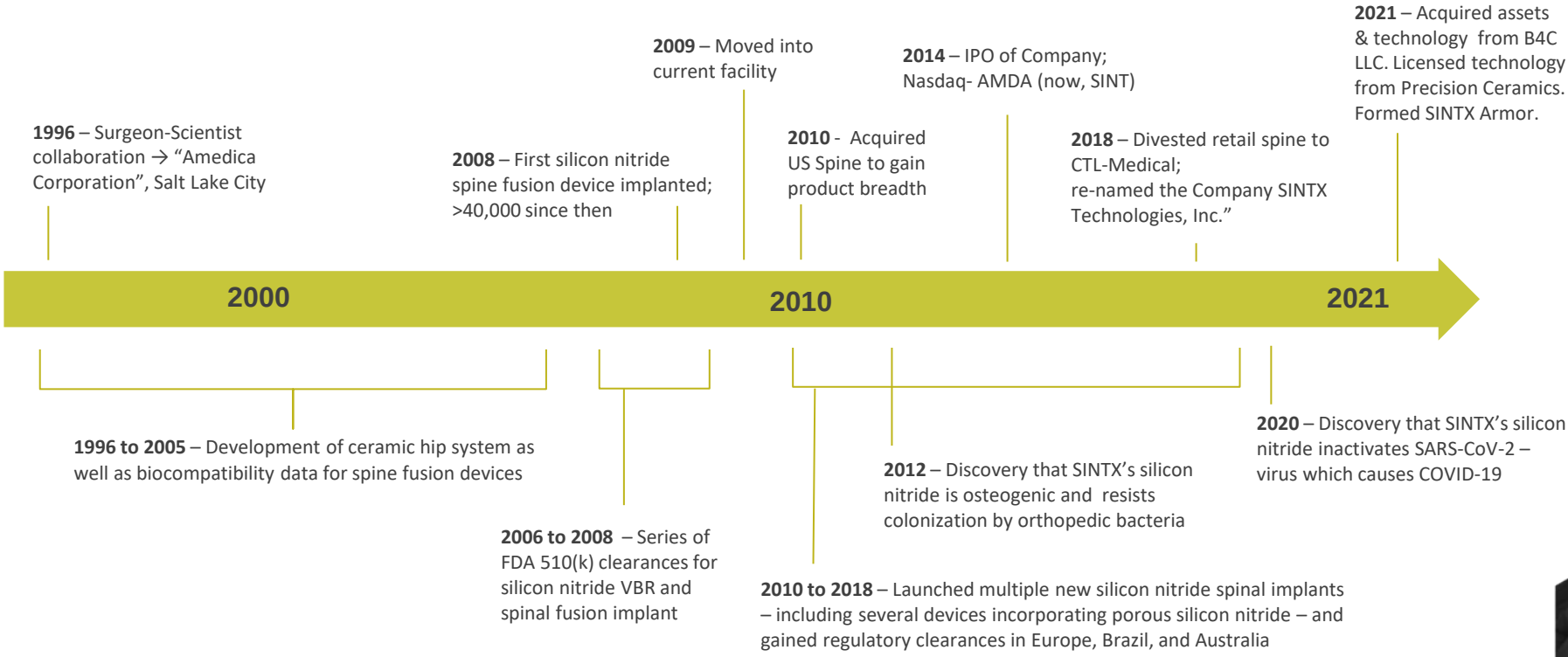


OUR VISION

We are dedicated to the manufacturing, research, and development of ceramic materials - specifically our silicon nitride.

We are committed to developing advanced material science – based solutions to improving the quality of human life and to expanding into multiple industries.

SINTX HISTORY (From 1996 to Present)



SINTX LEADERSHIP

B. Sonny Bal, MD, JD, MBA, Ph.D

CHAIRMAN OF THE BOARD CHIEF EXECUTIVE OFFICER

- Orthopedic surgeon and attorney
- Ceramic scientist and investigator
- CEO since 2014, board since 2012

Ryan Bock, Ph.D.

V.P. RESEARCH AND DEVELOPMENT

- 20 years research in advanced ceramics

Donald Bray

V.P. BUSINESS DEVELOPMENT – INDUSTRIAL & ARMOR

- 35 years background and experience in technical ceramics and business development

David O'Brien

CHIEF OPERATING OFFICER

- 30 years of operations, manufacturing, and engineering experience with medical devices and ceramics

Joseph Palomo

V.P. BUSINESS DEVELOPMENT - ANTIPATHOGENIC

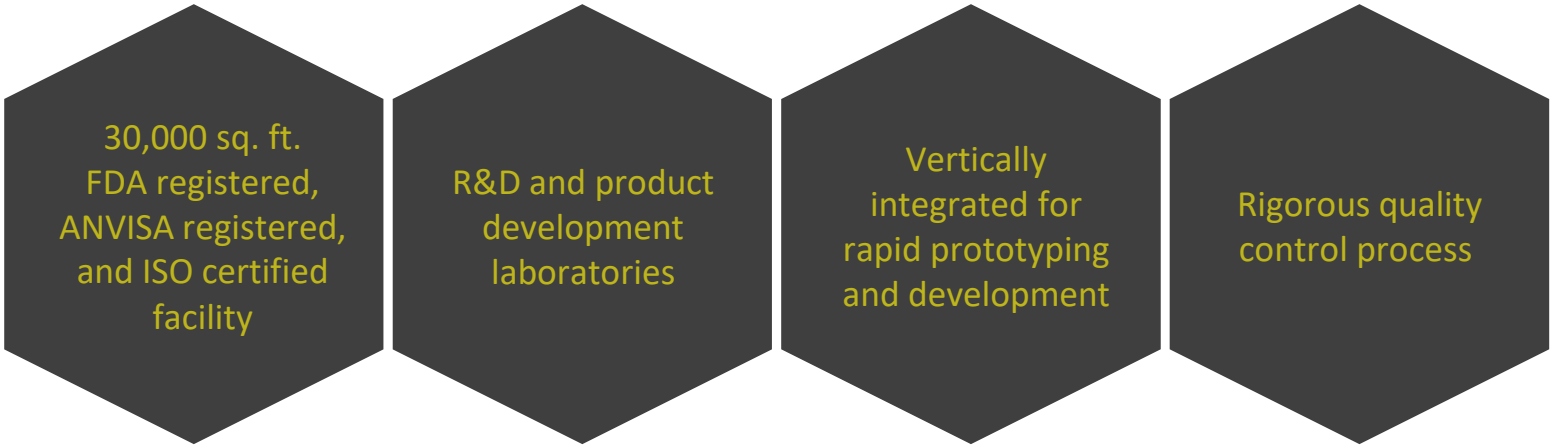
- 40 years of product development and manufacturing experience in protective apparel and medical devices

Michael Marcroft

V.P. BUSINESS DEVELOPMENT - BIOMEDICAL

- 20 years of experience in medical technology business development & marketing

OUR MANUFACTURING EXPERTISE



We are expanding a new 10,000 sq. ft. facility in Salt Lake City to manufacture body and vehicle armor products.

STRONG R&D IS A CORE STRENGTH

Our Innovations:

- Composites of silicon nitride and polymers
- Coatings of silicon nitride on other materials
- Enhanced formulations of silicon nitride
- Metal/silicon nitride composites
- Infiltration of fabrics and wound dressings with silicon nitride

STRONG, ACTIVE IP PORTFOLIO

Current focus is on patent applications for:

- Antibacterial and antipathogenic applications for silicon nitride
- Silicon nitride composites and coatings used in medical implants
- Silicon nitride manufacturing and formulation processes

14 Patents Issued

50 Patent Applications

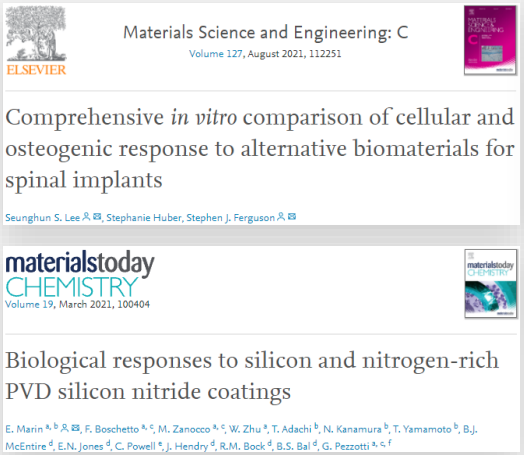
SINTX sold numerous spine-specific patents and patent applications to CTL in 2018.

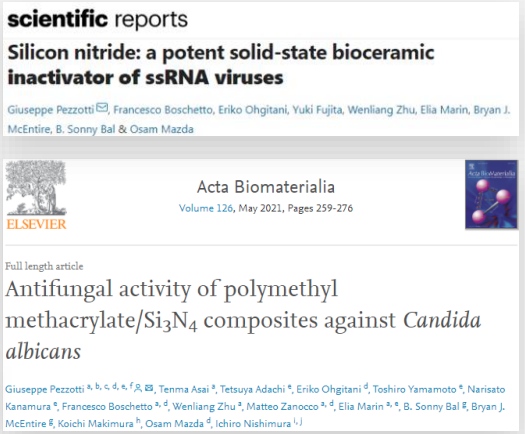
SCIENTIFIC ACHIEVEMENTS

Over 130 peer-reviewed scientific publications/conference proceedings

More than 85 technical and scientific presentations

Most, if not all our findings have been corroborated by independent centers





TARGET MARKETS AS OF 2022

BIOMEDICAL

- Used in over 40,000 human spine implantations
- Expanding with composites and coatings

ANTIPATHOGENIC

- Antibacterial, antifungal, and antiviral applications
- Applications to PPE, filters, surfaces, coatings, wound care, catheters, wound drains, incontinence, and fem care

INDUSTRIAL/ARMOR

- Able to withstand extreme conditions
- Used in aerospace, bearings, and drilling
- Personnel, aerospace, and vehicle protection

EXAMPLES OF OUR MATERIALS PORTFOLIO

SINTX SILICON NITRIDE (Solid, Nanostructured)

- Favorable to human cells and promotes bone fusion.
- Discourages bacterial adhesion on its surface.
- Inactivates bacteria, fungi, and viruses – including the SARS-CoV-2 virus.
- Versatile – amenable to development of composites and coatings
- NOTE – FDA approved for spine fusion implants, >40,000 implants

ADVANTAGES OF SILICON NITRIDE IN BONE FUSION

Faster Bone Healing

- Function of nanostructure and chemistry
- Enhances cell response for faster bone fusion

Antipathogenic Properties

- Resistant to bacteria, viruses, and fungi

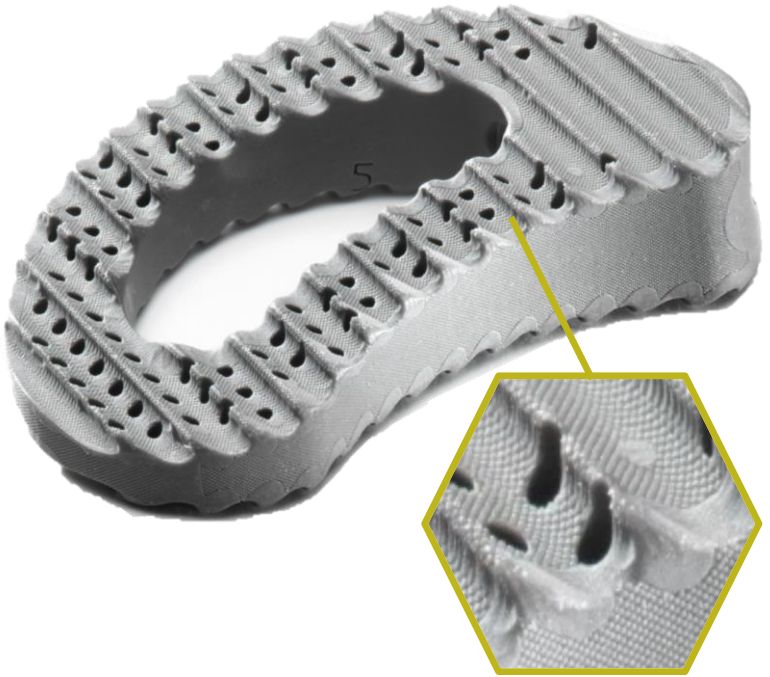
Superior Radiographic Imaging

- Easy to see on x-ray, CT, and MRI
- No image distortion

ALL CLAIMS CONFIRMED INDEPENDENTLY

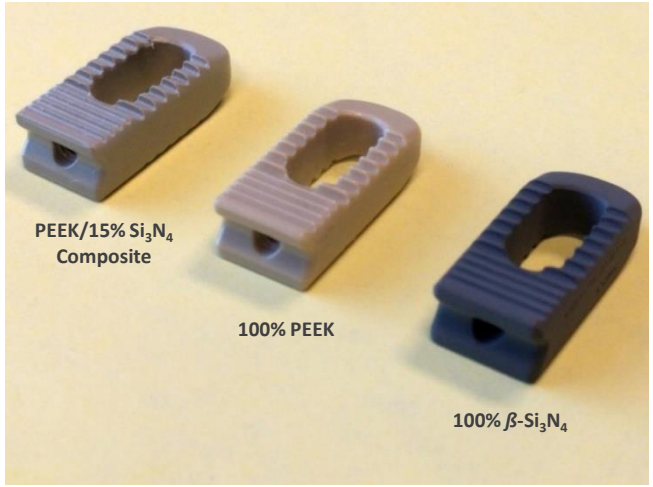
POROUS AND LASER TEXTURED IMPLANTS

- Aimed at improving surface texture
- Pore size and laser texturing are ideal for bony in-growth
- First sales to spine partner in 2021
- Commercial discussions under way in foot & ankle market



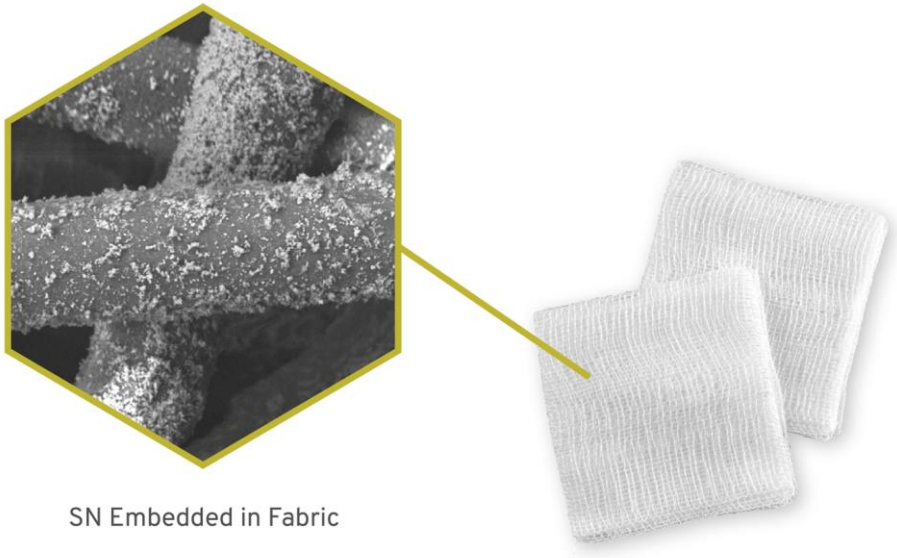
SN-PEEK COMPOSITE

- Extruded compound of silicon nitride and PEEK (poly[ether ether ketone])
- Can be machined into implants
- Combines familiarity and machinability of PEEK with silicon nitride
- Retains antibacterial and osteogenic properties
- Covered under US Patent 10,806,831
- FDA Master File submitted in early 2021
- First sales in 2021



NON-WOVEN FABRIC INFILTRATED WITH SILICON NITRIDE

- Fabrics have demonstrated contact inactivation of multiple viral strains, including SARS-CoV-2
- Applications include masks, filters, wound care, etc.
- Developed additional antipathogenic grade of silicon nitride powder, with first sale in 2021



SN Embedded in Fabric

Wound Dressing (Under Development)

SINTX ARMOR

BoroShock
A 100% boron carbide material for ultimate lightweight performance in ballistic applications.

DuraShock
A composite material made of boron carbide and silicon carbide (licensed from Precision Ceramics USA) for exceptional multi-hit performance against ballistic threats.

2022 KEY OBJECTIVES

EXECUTE ON THE LAUNCH OF SINTX ARMOR

- Get the new facility fully operational in the 1st half of the year
- Generate revenue in the 3rd quarter

DEVELOP NEW LINES OF REVENUE

- New markets: Antipathogenic & Industrial
- New non-spine products
- Pursue M&A opportunities

EXPAND SILICON NITRIDE'S SUCCESSES IN SPINE

- New materials (SN-PEEK), new manufacturing technologies, new global markets

CONTINUE ROBUST R&D PROGRAM

- Maintain leadership, monitor competitive landscape
- Co-develop new products with external partners

2022 CATALYSTS FOR GROWTH

BIOMEDICAL CATALYSTS FOR GROWTH IN 2022

Spine – Awarded a $300k NIH grant for 3D printed composite implants; collaboration with Drexel University and Thomas Jefferson University

Foot and Ankle – Leveraging success in the spine market to attract interest from this market in existing and new manufacturing technologies

Arthroplasty – Agreement with global medical device manufacturer to develop orthopedic implant coatings

Wound Care – Prototype development ongoing with two global wound care companies

Craniomaxillofacial – $300K grant application to NIH for 3D printed composite implants; collaboration with Drexel University, Thomas Jefferson University, and University of Pennsylvania

ANTIPATHOGENIC CATALYSTS FOR GROWTH IN 2022

Silicon nitride is proven to inactivate wide range of bacteria, fungi, and viruses, including SARS-CoV-2 (Claims verified independently)

Partnership Agreements

- Iwatani Corporation: Filters and coatings
- (Confidential): Antipathogenic face masks and mask filters
- Several other partnership agreements in process

INDUSTRIAL CATALYSTS FOR GROWTH IN 2022

Armor - Complete technology transfer, add necessary infrastructure to new Salt Lake City facility, and begin production.

Aerospace – Preferred material due to mechanical robustness and ability to perform at high temperatures

Automotive – Extends contact fatigue life through material strength, toughness, and resistance to chemical and thermal factors

Energy – Corrosion resistance of material can help extend the life of solid oxide fuel cells

Cutting Tools – Enables high cutting speeds and feeds

THANK YOU

DISCLAIMER

Forward-Looking Statements

This presentation contains forward-looking statements about SINTX Technologies, Inc. (the "Company"). These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements relate to the Company's financial results, products, product candidates, the expected timing of the regulatory approval of our product candidates, regulatory processes and objectives, potential benefits of the Company's product candidates, intellectual property and related matters, all of which involve known and unknown risks and uncertainties. Actual results may differ materially from the forward-looking statements discussed in this presentation.

Accordingly, the Company cautions investors not to place undue reliance on the forward-looking statements contained in, or made in connection with, this presentation. The forward-looking statements contained in this presentation are further qualified by the detailed discussion of risks and uncertainties set forth in the Company's Annual Report on form 10-K filed with the Securities and Exchange Commission (SEC) on March 22, 2021, and in the Company's other filings with the SEC which can be obtained on the Company's website at www.sintx.com or on the SEC website at www.sec.gov. The forward-looking statements contained in this document represent the Company's estimates and assumptions only as of the date of this presentation and the Company undertakes no duty or obligation to update or revise publicly any forward-looking statements contained in this presentation as a result of new information, future events or changes in the Company's expectations.

** Supporting documentation for all claims in this presentation can be found at https://sintx.com/resources/references/