

FOOD BIOTECHNOLOGY • ALTERNATIVE PROTEIN SKILL DEVELOPMENT



NTHRYS
OPC PVT LTD



Single-Cell Protein & Mycoprotein Industrial Manufacturing Training Programs

A complete industrial catalogue of hands-on alternative-protein training modules — from bacterial & yeast SCP to fungal mycoprotein & gas fermentation.

55

PROGRAMS

10

CATEGORIES

2026

EDITION

Program Categories at a Glance

This catalogue lists every single-cell protein and mycoprotein our training programs are equipped to manufacture and teach, organised into 10 technology streams. Each program carries a unique product code for easy reference, enrolment and certification.

STREAM	CATEGORY FOCUS	DESCRIPTION	COUNT
NCP-BC	Bacterial Single-Cell Protein	Methanotroph, methylotroph & H2-oxidizer protein	5
NCP-YS	Yeast Single-Cell Protein	Candida, Kluyveromyces & Yarrowia protein	6
NCP-MY	Fungal Mycoprotein	Fusarium, Aspergillus & mycelium protein production	6
NCP-AL	Algal & Cyanobacterial Protein	Spirulina, Chlorella & microalgal protein production	5
NCP-GF	Gas-Fermentation Protein (C1)	Methane, CO2/H2 & syngas protein production	5
NCP-SU	Substrate & Feedstock Processing	Whey, molasses, agro-waste & glycerol substrates	5
NCP-PR	Production & Fermentation Technology	Submerged, air-lift & continuous SCP production	6
NCP-DS	Downstream: Harvest, Drying & RNA Reduction	Dewatering, RNA reduction & biomass drying	6
NCP-FT	Texturization & Food Formulation	Mycoprotein texturising & meat-analogue formulation	5
NCP-AP	Feed, Food & Aqua Applications / Grades	Aquafeed, livestock, food & supplement grades	6
Total training programs			55

HOW TO READ A CODE

NCP – BC – 01

NCP Nthrys Cell-Protein Program BC Category stream 01 Program number

01

CATEGORY • NCP-BC

Bacterial Single-Cell Protein

Methanotroph, methylotroph & H₂-oxidizer protein

5

PROGRAMS

CODE	TRAINING PROGRAM	DESCRIPTION
NCP-BC-01	Methanotroph SCP	Methane-fed bacterial protein.
NCP-BC-02	Methylotroph (Methanol) SCP	Methanol-fed protein.
NCP-BC-03	Hydrogen-Oxidizing Bacterial SCP	H ₂ / CO ₂ bacterial protein.
NCP-BC-04	Photosynthetic Bacterial SCP	PSB protein biomass.
NCP-BC-05	Lactic / Acetogen Bacterial SCP	Fermentation bacterial protein.

02

CATEGORY • NCP-YS

Yeast Single-Cell Protein

Candida, Kluyveromyces & Yarrowia protein

6

PROGRAMS

CODE	TRAINING PROGRAM	DESCRIPTION
NCP-YS-01	Candida SCP	Candida yeast protein.
NCP-YS-02	Saccharomyces SCP	Brewer's / baker's yeast protein.
NCP-YS-03	Kluyveromyces (Whey) SCP	Whey-fed yeast protein.
NCP-YS-04	Yarrowia lipolytica SCP	Oleaginous yeast protein.
NCP-YS-05	Torula Yeast Protein	Candida utilis food protein.
NCP-YS-06	Spent-Brewery Yeast Protein	Recovered yeast protein.

03

CATEGORY • NCP-MY

Fungal Mycoprotein

Fusarium, Aspergillus & mycelium protein production

6

PROGRAMS

CODE	TRAINING PROGRAM	DESCRIPTION
NCP-MY-01	Fusarium Mycoprotein	Quorn-type filamentous protein.
NCP-MY-02	Aspergillus Mycoprotein	Koji-type fungal protein.
NCP-MY-03	Rhizopus Mycoprotein	Tempeh-type fungal protein.
NCP-MY-04	Neurospora Mycoprotein	Oncom-type fungal protein.
NCP-MY-05	Mycelium Biomass (Solid-State)	SSF mycelial protein.
NCP-MY-06	Mushroom-Mycelium Protein	Edible-fungus mycelium protein.

04

CATEGORY • NCP-AL

Algal & Cyanobacterial Protein

Spirulina, Chlorella & microalgal protein production

5

PROGRAMS

CODE	TRAINING PROGRAM	DESCRIPTION
NCP-AL-01	Spirulina Protein	Cyanobacterial protein biomass.
NCP-AL-02	Chlorella Protein	Green-microalgal protein.
NCP-AL-03	Nannochloropsis Protein	Marine-microalgal protein.
NCP-AL-04	Heterotrophic Algal Protein	Fermenter-grown algal protein.
NCP-AL-05	Mixed Microalgal Protein Blend	Multi-strain algal protein.

05

CATEGORY • NCP-GF

Gas-Fermentation Protein (C1)

Methane, CO₂/H₂ & syngas protein production

5

PROGRAMS

CODE	TRAINING PROGRAM	DESCRIPTION
NCP-GF-01	Methane Gas-Fermentation Protein	Natural-gas protein.
NCP-GF-02	CO ₂ / H ₂ Gas-Fermentation Protein	Power-to-protein.
NCP-GF-03	Syngas (CO) Fermentation Protein	Industrial-gas protein.
NCP-GF-04	Biogas-Fed Protein	Digester-gas protein.
NCP-GF-05	Gas-Loop Bioreactor Process	Gas-fermentation reactor design.

06

CATEGORY • NCP-SU

Substrate & Feedstock Processing

Whey, molasses, agro-waste & glycerol substrates

5

PROGRAMS

CODE	TRAINING PROGRAM	DESCRIPTION
NCP-SU-01	Whey / Dairy-Byproduct Substrate	Lactose-substrate processing.
NCP-SU-02	Molasses / Starch Substrate	Sugar-substrate processing.
NCP-SU-03	Agro-Residue Substrate	Lignocellulose substrate processing.
NCP-SU-04	Food / Brewery Waste Substrate	Waste-stream valorisation.
NCP-SU-05	Glycerol / Methanol Substrate	Industrial-byproduct substrate.

CODE	TRAINING PROGRAM	DESCRIPTION
NCP-PR-01	Submerged Fermentation Process	Stirred-tank SCP production.
NCP-PR-02	Air-Lift / Loop Bioreactor	High-cell-density reactor.
NCP-PR-03	Solid-State Fermentation	SSF mycoprotein process.
NCP-PR-04	Continuous / Chemostat Culture	Continuous SCP production.
NCP-PR-05	Strain Selection & Safety Screening	GRAS-strain selection.
NCP-PR-06	Sterility & Contamination Control	Aseptic process control.

08

CATEGORY • NCP-DS

Downstream: Harvest, Drying & RNA Reduction

Dewatering, RNA reduction & biomass drying

6

PROGRAMS

CODE	TRAINING PROGRAM	DESCRIPTION
NCP-DS-01	Cell Harvest & Dewatering	Centrifugation & filtration.
NCP-DS-02	RNA / Nucleic-Acid Reduction	Heat-shock RNA reduction.
NCP-DS-03	Cell Disruption / De-Bittering	Wall breakage & taste removal.
NCP-DS-04	Drum / Spray Drying	Biomass drying.
NCP-DS-05	Protein Isolate Extraction	Protein concentrate / isolate.
NCP-DS-06	Decolourisation & Deodorisation	Off-flavour & colour removal.

09

CATEGORY • NCP-FT

Texturization & Food Formulation

Mycoprotein texturising & meat-analogue formulation

5

PROGRAMS

CODE	TRAINING PROGRAM	DESCRIPTION
NCP-FT-01	Mycoprotein Texturisation	Fibre-alignment texturising.
NCP-FT-02	Meat-Analogue Formulation	Plant / fungal meat product.
NCP-FT-03	Protein Concentrate / Isolate	Food-protein ingredient.
NCP-FT-04	Extrusion Processing	High-moisture extrusion.
NCP-FT-05	Flavour & Binding Formulation	Finished-food formulation.

10

CATEGORY • NCP-AP

Feed, Food & Aqua Applications / Grades

Aquafeed, livestock, food & supplement grades

6

PROGRAMS

CODE	TRAINING PROGRAM	DESCRIPTION
NCP-AP-01	Aquafeed Protein	Fishmeal-replacement protein.
NCP-AP-02	Poultry / Swine Feed Protein	Livestock-feed protein.
NCP-AP-03	Pet-Food Protein	Companion-animal protein.
NCP-AP-04	Food-Grade Protein	Human-food protein grade.
NCP-AP-05	Nutritional Supplement Protein	Supplement-grade protein.
NCP-AP-06	Quality, Safety & Regulatory Compliance	Toxin / RNA / safety QC.

ENROL • FERMENT • NOURISH

Build a Career in Alternative-Protein Manufacturing

Every program in this catalogue is delivered as hands-on training on working fermentation and downstream equipment — covering strain selection & safety, submerged & gas fermentation, harvest & RNA reduction, drying, texturisation & food formulation, protein assay & QC and quality compliance. Mix and match programs to design a track that fits your goals.

55 training programs

10 technology streams

Unique **product code** for every module

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