

NUCLEAR MAGNETIC RESONANCE (NMR) - Prices (In South African Rand)

An additional admin fee of 7% will be levied for both Academic and Industry clients.

[SELECT A LINK HERE](#)

• [Solution State NMR prices](#)

• [Solid State NMR prices](#)

• [CD spectrometer prices](#)

Instrument access/hr	Self-run	Admin fee	Service fee/hr	Total			
Internal Standard ¹ H spectra	R 55	R 0	R30	R85			
Internal Rate	R160	R 0	R72	R232			
External Academic rate	R264	7%	R332	R596			
Commercial rate	R361	7%	R433	R794			
Professional time/hr*							
External Academic rate	R530						
Commercial rate	R1060						
Deuterated solvents (750 µl. ampule)	CDC13	CD2Cl2	CD3OD	DMSO-d6	D2O	C6D6	Acetone-d6
	R65	R450	R410	R233	R233	R200	R233
	Toluene-d8	THF-d8	TFA-d1	Ethanol-d6	Hexane-d8	DMF	CD3CN
	R 250	R 1020	R 350	R 3180	R 1060	R 898	R 321
Consumables	R 75						

Examples of common Liquid State NMR Commercial Applications

- Biopolymers: such as PGLA, identification, monomer content and residual monomers
- Absolute Structure determination of purified organic compounds
- Speciation of Inorganic complexes
- Heparin: quality control using latest USP monograph testing for over sulphated chondroitin sulfate and other impurities
- Poloxamer: weight and % oxyethelene
- Chitosan: % deacetylation
- Silicone: polydimethylsiloxane
- Quantitative ¹³C NMR of polyethylene and polypropylene
- Quality control of Aloe Vera
- Polymer Tacticity
- Flavonoid identification
- Cannabis quantitative and qualitative analysis of cannabinoids

Test	Application	Monographs
	General NMR method	USP, EP 2.2.33, ASTM E386
Aloe Vera quality control	Origin of an extract and to distinguish between different plant sources	
Alginate	Chemical composition and sequential structure from ¹ H and ¹³ C	ASTM F2259
Amyl Nitrite	¹ H Identification	USP
polypropylene, polyethylene	Quantitative ¹³ C	
Buserelin	¹ H Identification	EP
Chitosan	% Deacetylation, ¹ H	ASTM F2260
Cod-liver Oil	¹³ C Identification and positional Distribution ($\beta(2)$ -acyl) of fatty acids	EP
Enoxaparin	¹³ C Identification	USP
Fats and oils	¹ H, ¹³ C Determination of fatty acid composition in fats and oils	~
Gadoversetamine	Hydroxypropyl Betadex	USP
Polymer tacticity	Quantitative ¹³ C	~
Goserelin	¹³ C Identification	EP
Heparin	¹ H Identification and OSCS screening	USP, EP
Olis	¹³ C Distinction between plant and synthetic oils	
Hydroxypropyl Betadex	¹ H Molar Substitution	USP, EP
Lauromacrogol	¹³ C-Average chain length of fatty alcohols and moles of ethylene oxide	EP
Medronic Acid	¹ H Identification and Impurity determination	EP
Orphenadrine Citrate	¹ H-Isomer Content	USP
Simethicone	¹ H- Identification	~
Oxytocin	¹ H-Identification	USP
Proteins, peptides	2D, 3D Structure determination from various NMR experiments	
Plant extract complexity	Diffusion separation of components in solution (DOSY)	
Poloxamer	¹ H-Weight % Oxyethylene	USP

Polyoxyl 10 Lleyl Ether	1H-Average polymer length	USP
Poly lactide and glycolide	1H, 13C- Identification, residual monomer, lactide/glycolide ratio	ASTM F2579, F1925, F2313
Polyoxyl 20 Cetostearyl Ether	1H-Average polymer length	USP
Salmon Oil	13C-Identification and Positional Distribution ($\beta(2)$ -acyl) of fatty acids	EP
* Partly produced from NMR Spectroscopy in Pharmaceutical Analysis (B. Diehl, et al., 2008) and the various available Monographs		

***An additional admin fee of 7% will be charged to all external clients, both Academic and Industry.*

Solid State NMR Prices 2023			
Self-run prices (*)	SU academics	academics	commercial
<u>half day (max. 4hrs)</u>		722	1135
<u>day (max. 24hrs)</u>	1094	1445	2527
<u>weekend</u>		2725	4813
<u>week</u>	3000*	6811	12635
* 7 Days. (if more than two days is used, the weekly rate applies)			

Service prices				
<i>per run</i>	academics		commercial	
<u>measurement time(*)</u>	first sample	further samples	first sample	further samples
max. 1hr run	R 601	R 385	R 1053	R 662
max. 3hrs run	R 891	R 674	R 1565	R 1203
max. 7hrs run	R 1143	R 914	R 1926	R 1564
max. 24 hrs run	R 1926	R 1624	R 3370	R 2887
* includes instrument time, experimental setup, standard sample preparation				
<u>analysis packages</u>	academics		commercial	
	first sample	further samples	first sample	further samples
<u>coal characterization</u>	R 3008	R 2166	R 5294	R 3850
<u>sample prep fee (*)</u>	R 233 / sample		R 318 / sample	
* only applicable, if sample preparation is time-consuming (sticky or toxic samples, ...)				
<u>Professional time (*)</u>	R 481 / hr		R 963 /hr	
* Costs of processing, converting to xy data, interpretation. These costs are not charged, if the project is done as collaborative work for publication.				

CD SPECTROMETER PRICING 2023

Instrument access/hr.	Self -run	Submitted	Immediate Priority service
Internal rate	R200	R400	R530
Academic rate	R397	R529	R625
Commercial rate	R454	R662	R 1060

Professional time/hr.*	*sample prep., plots, interpretation, report or publication writing, consulting (initial discussions on project feasibility and structure excluded)		
External Academic rate	R530		
Commercial rate	R1060		
Analytical grade solvents available	Methanol	Acetonitrile	
	R60/ml	R60/ml	
N2 gas for temperature work at the NMR facility are free			