NEIMME/BCaRA/CaRR - British	Carbonization Research Association - Carbonization Research Report				
Code	Title	Author	Date of publicati	Location	Digitised
	Mixing and aeration in biological-treatment plants: a study of six designs				
NEIMME/BCaRA/CaRR/1	of the surface-aerated system		1974	LP11 Bay 2	
	A note on the effect of the speed of rotation of the micum drum on				
NEIMME/BCaRA/CaRR/2	coke strength and abrasion indices		1974	LP11 Bay 2	
NEIMME/BCaRA/CaRR/3	The influence of carbonization conditions on the development of optical anisotropy in coke		1974	LP11 Bay 2	
NEIMME/BCaRA/CaRR/4	Rapid analytical methods for coke-oven effluents: collaborative studies		1974	LP11 Bay 2	
NEIMME/BCaRA/CaRR/5	Studies of coke degradation in different drum tests		1974	LP11 Bay 2	
NEIMME/BCaRA/CaRR/6	The determination of bitumen in tar-bitumen blends by gel-permeation chromatography		1974	LP11 Bay 2	
NEIMME/BCaRA/CaRR/7	The CTRA road-hardness probe		1974	LP11 Bay 2	
NEIMME/BCaRA/CaRR/8	Further studies of the influence of additives in a coke-oven charge on the tensile strength and reactivity of coke		1974	LP11 Bay 2	
NEIMME/BCaRA/CaRR/9	A preliminary study of pore formation during the carbonization of coal		1974	LP11 Bay 2	
NEIMME/BCaRA/CaRR/10	Further studies of the properties of coke withdrawn from the tuyeres of blast furnaces		1974	LP11 Bay 2	
	Studies of the physical properties of coke: measurement of the dynamic				
NEIMME/BCaRA/CaRR/11	Young's modulus and its variation with temperature		1974	LP11 Bay 2	
NEIMME/BCaRA/CaRR/12	Application of extra-high temperature to carbonization, using a 350-kg oven		1974	LP11 Bay 2	
NEIMME/BCaRA/CaRR/13	Further studies of the development of optical anisotropy during carbonization of coking-coal vitrains		1975	LP11 Bay 2	

	A preliminary study on a tubular furnace for the production of coke			
NEIMME/BCaRA/CaRR/14	under carbonizing conditions similar to those in a 10-t test oven	1975	LP11 Bay 2	
NEIMME/BCaRA/CaRR/15	Critical adhesion temperature for surface dressing	1975	LP11 Bay 2	
NEIMME/BCaRA/CaRR/16	The analysis of coal-carbonization by-products by gas chromatography	1975	LP11 Bay 2	
	Studies of the breakdown of coke arising from chemical reaction and			
NEIMME/BCaRA/CaRR/17	mechanical treatment at elevated temperatures	1975	LP11 Bay 2	
	Studies of coke texture using a computerized microscope for automatic			
NEIMME/BCaRA/CaRR/18	image analysis: part 1	1975	LP11 Bay 2	
NEIMME/BCaRA/CaRR/19	The estimation of the breeze content of coal/breeze blends	1975	LP11 Bay 2	
	A proposed uniform technique for the assessment of smoke leakage			
NEIMME/BCaRA/CaRR/20	from coke ovens during carbonization	1975	LP11 Bay 2	
	The extraction of tar acids from low-temperature-tar fractions using			
NEIMME/BCaRA/CaRR/21	aqueous methanol	1975	LP11 Bay 2	
	Pore-structure development during coal carbonization: the role of			
NEIMME/BCaRA/CaRR/22	charge density and particle-size distribution	1975	LP11 Bay 2	
	The biological treatment of coke-oven effluents: laboratory studies			
NEIMME/BCaRA/CaRR/23	using the rotating-disc process	1975	LP11 Bay 2	
	The treatment of carbonization effluents: a study of some post-			
NEIMME/BCaRA/CaRR/24	biological treatment processess	1975	LP11 Bay 2	SCANNED
	The development of optical anisotropy during the carbonization of			
NEIMME/BCaRA/CaRR/25	caking-coal vitrains	1976	LP11 Bay 2	
	Evaluation of the carryover of solids during on-main gravity charging of			
NEIMME/BCaRA/CaRR/26	wet and preheated coal to the 10-t oven	1976	LP11 Bay 2	
	Electrolytic recausticization in the extraction of tar acids from distillate			
NEIMME/BCaRA/CaRR/27	tar-oil fractions	1976	LP11 Bay 2	
	The separation and determination of polynuclear aromatic			
NEIMME/BCaRA/CaRR/28	hydrocarbons by high-performance liquid chromatography: part 1	1976	LP11 Bay 2	
NEIMME/BCaRA/CaRR/29		1976	LP11 Bay 2	

	Studies of the dependence of combustion and structural properties of		
	coke upon the rank of the parent coal. part 1: laboratory-scale		
NEIMME/BCaRA/CaRR/30	investigations. Part 2: cokes prepared in a 7-kg electrically-heated oven	1976	LP11 Bay 2
	Studies of coke texture using a computerized microscope for automatic		
NEIMME/BCaRA/CaRR/31	image analysis: part 2	1976	LP11 Bay 2
	A consideration of the plastic-layer thickness developed within a coke-		
NEIMME/BCaRA/CaRR/32	oven charge	1976	LP11 Bay 2
	The effect of the nature of quinoline insolubles (QI) on electrode binder		
NEIMME/BCaRA/CaRR/33	pitch properties	1976	LP11 Bay 2
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NEIMME/BCaRA/CaRR/34	Nitrile rubber-modified road tars for surface dressing applications	1976	LP11 Bay 2
	A study of some of the factors influencing the development of optical		
NEIMME/BCaRA/CaRR/35	anisotropy in coke	1976	LP11 Bay 2
	A study of the partial gasification of coke and its influence on the coke		
NEIMME/BCaRA/CaRR/36	tensile strength	1976	LP11 Bay 2
	Mixing and aeration in biological-treatment plants: examination of		
NEIMME/BCaRA/CaRR/37	existing surface aeration system designs	1977	LP11 Bay 2
	Further studies in the breakdown of coke in the micum test. I. the effect		
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NEIMME/BCaRA/CaRR/38	II. Comparison of M40 indices for different size grades of coke	1977	LP11 Bay 2
NEIMME/BCaRA/CaRR/39	Pore structure development during carbonization of blended charges	1977	LP11 Bay 2
NEIMME/BCaRA/CaRR/40	The nature of the oxidized polyhydric material in carbonization effluents	1977	LP11 Bay 2
	Observations on the measurement of coke size and its relevance to		
NEIMME/BCaRA/CaRR/41	studies of coke breakage	1977	LP11 Bay 2
	Investigation of the composition of tuyere coke by analyzing the surface		
NEIMME/BCaRA/CaRR/42	material removed by abrasion	1977	LP11 Bay 2
	A study of the influence of speciman size and rate of loading on the		
NEIMME/BCaRA/CaRR/43	tensile strength of coke	1977	LP11 Bay 2

	Further considerations of the plastic layer thickness developed within a		
NEIMME/BCaRA/CaRR/44	coke-oven charge	1977	LP11 Bay 2
	Theory and practice of linear programmed-temperature gas		
	chromatography (LPTGC) in relation to the analysis of coal-tar neutral		
NEIMME/BCaRA/CaRR/45	fractions	1977	LP11 Bay 2
	A 350-kg- and 10-t-oven investigation into the effects of preheating		
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NEIMME/BCaRA/CaRR/46	metallurgical blend from the USA	1978	LP11 Bay 2
	The biological treatment of coke-oven effluents: an appraisal of the		
NEIMME/BCaRA/CaRR/47	rotating-disc process from laboratory and pilot-scale studies	1978	LP11 Bay 2
	The biological treatment of coke-oven effluents: further studies on the		
NEIMME/BCaRA/CaRR/48	role of organic inhibitors	1978	LP11 Bay 2
	A surface-dressing trial with tar containing butadiene-acrylonitrile		
NEIMME/BCaRA/CaRR/49	rubber on the B5305 at Sebergham, Cumbria	1978	LP11 Bay 2
	Poly(methyl methacrylate)- modified road tars for surface-dressing		
	applications. part 1: Laboratory investigation. Part 2: Full-scale surface-		
NEIMME/BCaRA/CaRR/50	dressing trial	1978	LP11 Bay 2
	A study of the changes in coke structure and strength brought about by		
NEIMME/BCaRA/CaRR/51	reaction with carbon dioxide at 1000 C	1978	LP11 Bay 2
NEIMME/BCaRA/CaRR/52	The production of coke in a laboratory tubular furnace	1978	LP11 Bay 2
	The use of oven carry-over and preheater fines in the production of coal-		
NEIMME/BCaRA/CaRR/53	tar enamel modulates	1978	LP11 Bay 2
NEIMME/BCaRA/CaRR/54	A simple volatility test for tar products	1978	LP11 Bay 2
	The use of vacuum microsublimation and TLC plate fluorescence		
NEIMME/BCaRA/CaRR/55	scanner in the determination of benzo(a)pyrene	1978	LP11 Bay 2
	Micro-organisms occurring in the activated-sludge treatment of		
NEIMME/BCaRA/CaRR/56	carbonization effluents: preliminary studies	1978	LP11 Bay 2
	Aspects of pore-structure development during carbonization of		
NEIMME/BCaRA/CaRR/57	preoxidized and preheated coals	1978	LP11 Bay 2
	Further surface-dressing trials in Cumbria with tar containing butadiene-		
NEIMME/BCaRA/CaRR/58	acrylonitrile rubber	1978	LP11 Bay 2
	A study of the reactivity of vitrain cokes in relation to their optical		
NEIMME/BCaRA/CaRR/59	anisotropy	1978	LP11 Bay 2

	A study of the influence of the addition of coal-tars to vitrains on the			
NEIMME/BCaRA/CaRR/60	optical anisotropy developed during carbonization	1978	LP11 Bay 2	
	The viscosity of pitch at elevated temperatures. part 1 Coke-oven			
NEIMME/BCaRA/CaRR/61	binder pitches	1978	LP11 Bay 2	
	An investigation of various methods of recovering solids from solids-			
	bearing effluents produced by the preparation and charging of			
NEIMME/BCaRA/CaRR/62	preheated coal to the 6.5-m oven at BCRA	1978	LP11 Bay 2	
	A comparison between the quantity of benzene-soluble material and			
NEIMME/BCaRA/CaRR/63	cyclohexane-soluble material in various atmospheres	1979	LP11 Bay 2	SCANNED
	An infrared spectroscopic study of the influence of oxygen in coal on the			
NEIMME/BCaRA/CaRR/64	plastic stage of the coking process	1979	LP11 Bay 2	
	Physical strength tests on coke fed to and withdrawn from blast			
NEIMME/BCaRA/CaRR/65	furnaces	1979	LP11 Bay 2	
	The influence of low-volatile coal additions on the strength and			
NEIMME/BCaRA/CaRR/66	structural properties of 7-kg cokes	1979	LP11 Bay 2	
	An investigation into the use of hydrogen peroxide for the purification			
NEIMME/BCaRA/CaRR/67	of carbonization wastes	1979	LP11 Bay 2	
NEIMME/BCaRA/CaRR/68	Thermal analysis of electrode binder pitches	1979	LP11 Bay 2	
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	Low-temperature tar content of bituminous materials: part 1: dense tar			
NEIMME/BCaRA/CaRR/70	surfacing with crushed rock aggregate	1979	LP11 Bay 2	
NEIMME/BCaRA/CaRR/71	A comparison of the minor impurities in refined naphthalenes	1979	LP11 Bay 2	
	A review of different charging techniques in the carbonization of			
NEIMME/BCaRA/CaRR/72	preheated coal at BCRA	1979	LP11 Bay 2	SCANNED
	Studies of coke texture using a computerized microscope for automatic			
NEIMME/BCaRA/CaRR/73	image analysis: part 3	1979	LP11 Bay 2	
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	activated sludge from the biological treatment of carbonization			
NEIMME/BCaRA/CaRR/75	effluents	1979	LP11 Bay 2	
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NEIMME/BCaRA/CaRR/76	atomic absorption spectrophotometry	1979	LP11 Bay 2	

	Low-temperature tar content of bituminous materials: part 2: dense			
NEIMME/BCaRA/CaRR/77	tarmacadam basecourse with crushed rock aggregate	1979	LP11 Bay 2	
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	The development of optical anisotropy during the carbonization of			
NEIMME/BCaRA/CaRR/80	vitrains in relation to changes in other properties	1979	LP11 Bay 2	
NEIMME/BCaRA/CaRR/81	The determination of boron in coking- and tar-plant liquid effluents	1980	LP11 Bay 2	
	Further studies of the partial gasification of coke in relation to the coke			
NEIMME/BCaRA/CaRR/82	tensile strength	1980	LP11 Bay 2	
	Spraying characteristics of a nitrile-rubber-modified low-temperature			
NEIMME/BCaRA/CaRR/83	road tar for surface-dressing applications	1980	LP11 Bay 2	
NEIMME/BCaRA/CaRR/84	Resistance of rolled asphalts to attack by petroleum oils	1980	LP11 Bay 2	
NEIMME/BCaRA/CaRR/85	The phosphorus content of coal and coke	1980	LP11 Bay 2	
	The determination of oxygen demand of and organic carbon in			
	carbonization plant effluents. part a: oxygen demand and organic			
	carbon tests and their relevance to the analysis of carbonization plant			
	effluents. part b: a comparison of the COD, PV and TOC response factors			
	of some constituents of carbonization plant effluents. part c: a			
	comparison of COD, PV and TOC data on various carbonization plant			
NEIMME/BCaRA/CaRR/86	liquors and treated effluents	1980	LP11 Bay 2	
NEIMME/BCaRA/CaRR/87	Changes in coke structure associated with preheating of the coal charge	1980	LP11 Bay 2	
NEIMME/BCaRA/CaRR/88	Studies of the size degradation of coke at ambient temperature	1980	LP11 Bay 2	
	The application of selective chromatographic and spectrofluorimetric			
	techniques in the separation, characterization, and analysis of polycyclic			
NEIMME/BCaRA/CaRR/89	aromatic hydrocarbons in coke-oven pitch	1980	LP11 Bay 2	
NEIMME/BCaRA/CaRR/90	Some considerations of the desulphurization of coal for cokemaking	1980	LP11 Bay 2	
	The evaluation of the Nippon Steel Corporation reactivity and post-	1333		
NEIMME/BCaRA/CaRR/91	reaction-strength test for coke	1980	LP11 Bay 2	

	Further investigations into the treatment of carryover slurries from coal		
NEIMME/BCaRA/CaRR/92	preheating and pipeline-charging	1980	LP11 Bay 2
NEIMME/BCaRA/CaRR/93	Heavy-duty pitch-bitumen for rolled asphalt wearing-courses	1981	LP11 Bay 2
	Further studies of the influence of low-volatile coal additions on the		
NEIMME/BCaRA/CaRR/94	strength, structural properties and reactivity of 7-kg-oven cokes	1981	LP11 Bay 2
NEIMME/BCaRA/CaRR/95	Moisture determination by microwave heating	1981	LP11 Bay 2
	The influence of tar and pitch additions to caking coals on the		
NEIMME/BCaRA/CaRR/96	anisotropic composition and microstrength of coke	1981	LP11 Bay 2
	Further studies on the role of inhibitors in the biological treatment of		
NEIMME/BCaRA/CaRR/97	carbonization wastes: development of a basic separation technique	1982	LP11 Bay 2
	Scanning electron microscopy of coke: relationships between coke-		
NEIMME/BCaRA/CaRR/98	carbon texture and coke properties	1982	LP11 Bay 2
NEIMME/BCaRA/CaRR/99	The physical and microscopic properties of electrode carbons	1982	LP11 Bay 2
	The variations in tensile strength and porous structure of blast-furnace		
NEIMME/BCaRA/CaRR/100	cokes	1982	LP11 Bay 2
	The separation and characterization of nitrogen heterocyclic componds		
NEIMME/BCaRA/CaRR/101	present in coke-oven pitch	1982	LP11 Bay 2
	The effects of charging rate, charge particle size and charge		
	temperature on the bulk density of preheated charges: pilot- and large-		
NEIMME/BCaRA/CaRR/102	scale studies	1982	LP11 Bay 2
	A comparison of the properties of cokes made in a laboratory furnace		
	and in the BCRA 250-kg test oven, with a study of the effect of inerts on		
NEIMME/BCaRA/CaRR/103	coke quality	1982	LP11 Bay 2
	Relationships between the composition and fluidity of British coals and		
	the structural properties and reactivity of the corresponding cokes		
NEIMME/BCaRA/CaRR/104	produced on the 250-kg scale of carbonization	1982	LP11 Bay 2
	Further studies on the role of inhibitors in the biological treatment of		
	carbonization wastes: improved removal; development of		
	chromatographic analysis and biological assay; and preliminary isolation		
NEIMME/BCaRA/CaRR/105	and characterization	1982	LP11 Bay 2